

aeromet

MONTHLY PROGRESS REPORT NO. 4

for the period June 1-30, 1976

to

ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

aeromet inc.

P.O. BOX FF NORMAN, OKLAHOMA 73069 405 329-2424

LIERRATY CONTROL NO.

5:480

no.



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D-553A, Building 50 Denver Federal Center P. O. Box 25047 Denver, CO 80225-0047 TN 854 . C64 . C3758 no. 4

MONTHLY PROGRESS REPORT NO. 4 for the period June 1-30, 1976

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ENVIRONMENTAL PROTECTION AGENCY REGION VIII

1860 Lincoln St., Suite 900 Denver, CO 80203

Contract No. 68-01-1946

by

Aeromet, Inc.

Box FF

Norman, OK 73070

August 16, 1976

COLORADO Cb TRACT

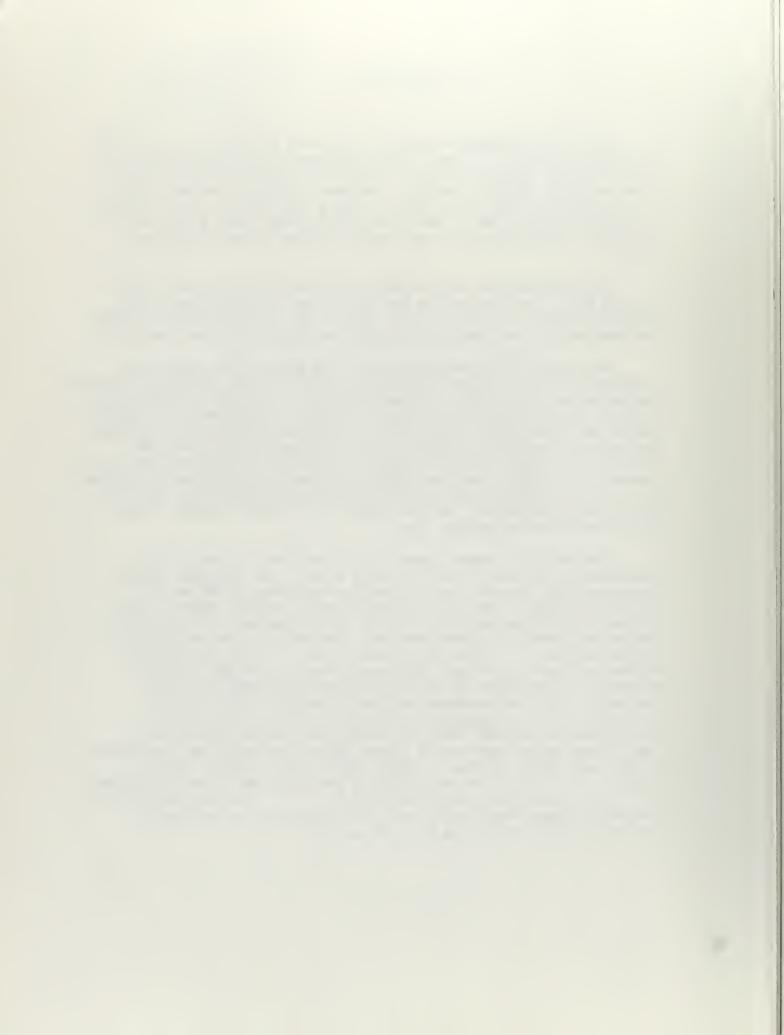
1.0 INTRODUCTION

Low level temperature and wind data were collected for June 1976 at Casper, Wyoming; the Shell Oil Co. Colorado CB Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville, Utah; and Rock Springs, Wyoming. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made 1/2 hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 600 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built in Rustrak strip chart recorder and the temperature was recorded within the range from -50 to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into six parts, one corresponding to each of the six field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows. . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, ... 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 ... The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.



2.1B Colorado CB Tract Field Summary

No problems occurred during the month of June at the Colorado CB Tract west of Rio Blanco, Colorado. The observers attempted 87% of the scheduled pilot balloon launches resulting in an 80% recovery of the temperature data and an 87% recovery of the wind data. The malfunctioning of the temperature sondes accounted for the 7% loss in temperature data. The observer failed to release a second temperature sonde in each case that the first attempt was unsuccessful.

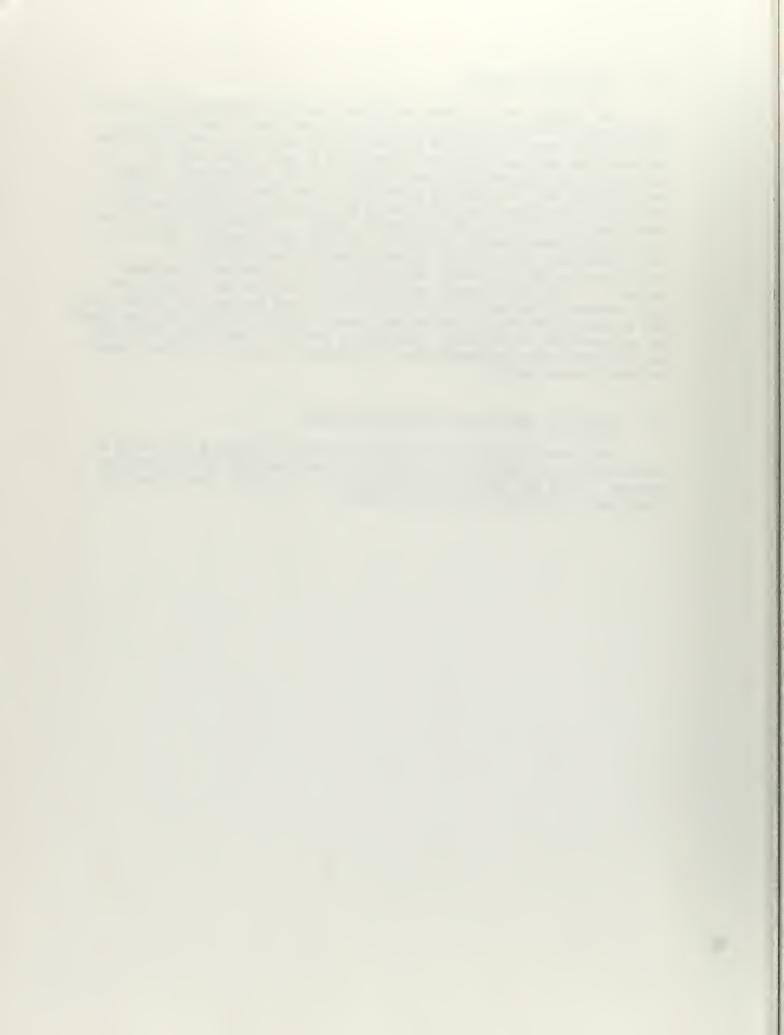


2.2 Mixing Layer Height

The average mixing layer height was derived subjectively from the morning and afternoon temperature and wind profiles. The morning sounding was near the minimum temperature while the afternoon sounding was near the maximum.temperature providing a good comparison for defining an average mixing layer height. If the mixing layer height derived from only the morning sounding for the lower 2000m was not maintained throughout the day because of temperature changes due to advection, then one was not defined to exist. A blank indicates there were insufficient data to calculate a mixing layer height. It is still contended that for the proper scientific evaluation and interpretation of the mixing layer height that an objective method be used. A library research on the topic is continuing, however the most acceptable method is to measure the minimum and maximum temperatures, add a heat island effect factor and trace the dry adiabatic to the point of intersection on the given temperature profile. The field sites are not equipped with minimum/maximum thermometers so an alternative method is under investigation.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.



3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

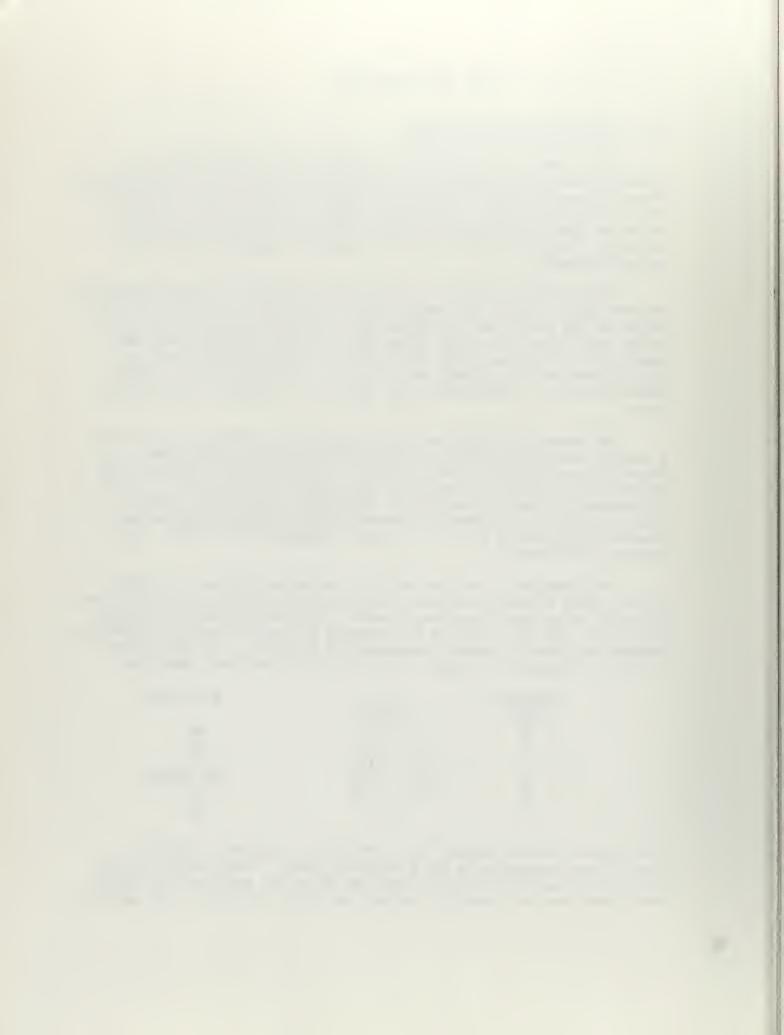
The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY	ΤΔ	WIND SPEED
CLASS	(°C/100m)	
Α	<-1.9	∢ 2
В	-1.91.7	<u><</u> 5
С	-1.71.5	< 6
D	-1.50.5	ALL SPEEDS
E	-0.5 - 1.5	<u><</u> 5
F	>1.5	₹3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,



if the $\Delta T/100\text{m}$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.



3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the V-component of the wind in m/s(6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate 'C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,II)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,

мантн: Маг	RCHT YEAR:	1976.	CASPER L. U	SEC 10 500 METERS
			t	
0:: 1 i	-			000 000 000 00 00
000000000000000000000000000000000000000	00000000000.0000)	45 46 47 48 49 50 51 52 53 51 55 56 57 58 59 60 61	000 000 000 000 0
133428183101115049999		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	יייייייווווווווווו	1111111111111
			22 222222222222	111111111111111
222222222222222222	2222222222222	222222222		23 3 3333333 33333
333333333333[33333]	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 , 3 3 3 3 3	333333333333	33, 3 3333333, 33333
		4444444444	44444444444	
44444444			5555 5555555555555	55555555 5555 5.5555
5555555555555555555	55555555555,222	3 3 3 3 3 3 3 3 3 3 3		6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
666666666666666666666666666666666666666	66666666666666	6666 66666	6666666666666	66,666,666666666666
		111 1111111	1777, 777777777777	
111111111111111111111111111111111111111				* * * * * * * * * * * * * * * * * * * *
***********	11.1 1111111 111	*****		
9999999999999999	999999999999	99 99999999	3 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	99999999999999999999999999999999999999
1 2 3 4 5 6 7 8 9 18 11 12 13 M 15 18 17 18 pp-soni	6 m 70 77 77 77 74 75 76 77 78 75 36 31 12 13			



and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER	CODE
А	1	
В	2	
C	3	
D	4	
E	5	
F	6	
Independent of Stability	7	

The station I.D. numbers are as follows:

STATION	I.D.	Number
Casper, Wyoming	1	
Colorado CB Tract	2	
Craig, Colorado	3	
Escalante, Utah	4	
Hanksville, Utah	5	
Rock Springs, Wyoming	6	

The month and season number codes are as follows.

MONTH	1-12
SEASON	13=DJF
	14=MAM
	15=JJA
	16=SON
ANNUAL	17



PILOT BALLOON SUMMARY COLORADO CB TRACT June, 1976

0090

June 1



	1200	The temperature data were interpolated over the $1 rac{1}{2}$ minute interval starting 2 minutes after the launch.
June 21	MORN	
	AFTN,	יס ספים עמריטיט אפן כי וומספי
June 23	0090	
	1200	
June 25	0090	
	1200	
June 27	0090	The T-Sonde malfunctioned 4 minutes after the launch and no more temperature data were recovered.
	1200	
June 29	MORN	
	AFTN	NO DESERVATIONAL MARKE RECEIVED.

June 19 0600



CLOUD COVER AND SIGNIFICANT WEATHER COLORADO CB TRACT June, 1976

DATE	MORNING	<u>AFTERNOON</u>
1	clear	clear, haze
3	scattered	scattered
5	clear	
7	clear	clear
9	clear	scattered
11	broken	scattered
13	scattered	scattered
15	broken, snowed 4 inches	scattered
17	overcast	scattered
19	clear	clear
21		
23	scattered	broken
25	clear	clear
27	clear	clear
29		



AVERAGE MIXING LAYER HEIGHT

COLORADO CB TRACT

JUNE, 1976

DATE	HEIGHT
1	500m
3	300m
5	400m
7	700m
9	750m
11	1400m
13	1000m
15	200m
17	none defined
19	1300m
21	
23	750m
25	1600m
27	none defined
29	
	1 3 5 7 9 11 13 15 17 19 21 23 25 27



	COL CO	11.401	LLEV CIT	45 WEILERS	GERMOTA	9 10 1/74	
06	101/76	TIME 06:00M	ST ASCEN	T RATE 600 FPM	DATA IN	TERVAL 15 SE	С.
ME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	DIT	MS DE	
86578994	SFC 150 300 450 958 1958 2958	2192 23940 23500 23000 3000 5000	18.00 16.32 15.01 12.70 12.77 -0.50 -10.00	0.0 -2.95 -1.31 -2.30 -4.10 -0.58 -4.10 -3.97 -3.44 -9.50 -2.79 -3.28	-0.02 0.63 -1.17 -1.17 -0.52 -0.52 -0.35	4 · 1 18 5 · 2 17 4 · 1 18 5 · 8 18 5 · 4 18 4 · 5 17 6 · 6	0
ŀ	COL CB	TRACT	FLEV 204	12 METERS	SOUNDIN	3 ID 1794	
06.	/01/76	TIME 06:00M	ST ASCENT	RATE 600 FPM	DATA IN	TERVAL 15 SE	С.
ME IN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP	V-COMP M/S	WND SPEED M/S	WND DIR DEG	
	011346755527589146755340275891112388753402771112388792	235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-9-1-235-6-8-8-9-1-235-6-8-8-9-1-235-6-8-8-9-1-235-6-8-8-9-1-235-6-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-	0513269251086739524532485 0010000110000012453445	1603786608NG514R847R5548R	1613797728216261988026223	1870 1870 1870 1883 1891 1996 1996 1799 1880 1773 1880 1901 1901 1901 1901 1901 1901 1901	

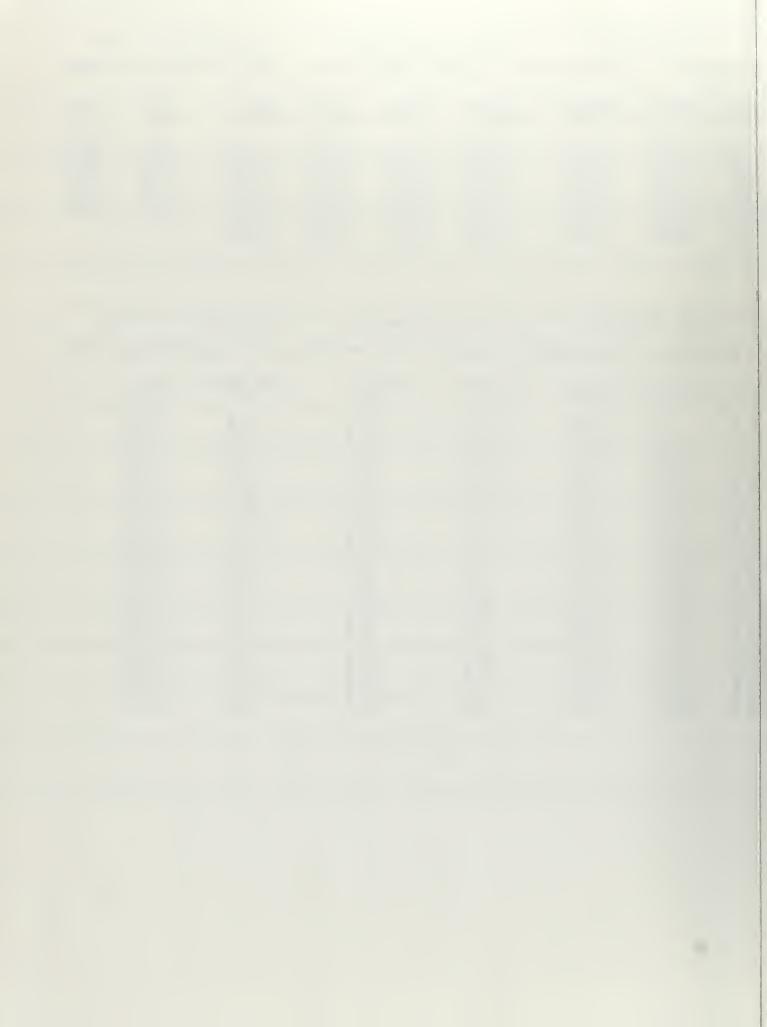
COL CB TRACT FLEV 2042 METERS SOUNDING ID 1794



	CUL CB	TRACT	ELEV 20	42 METERS	SUUNDING	ID 1846	,
ATE 06	/01/76	TIME 12:00	OMST ASCEN	IT RATE 600 FPM	DATA INT	ERVAL 15	SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	-	w5 M/S	DEG
0.86557 10.5559	SFC 150 150 458 508 5958 1958 2958	2192 2500 2500 25000 4000 5000	18 5 6 4 1 1 5 6 5 5 6 6 5 5 6 6 6 5 6 6 6 6 6 6	0.0 -1.86 -1.12 -1.21 -0.50 -4.50 -8.51 -9.30 -7.10	0.80 0.63 0.47 -0.02 0.96 -0.35 0.14 0.80	5.13.6 6.09.0 9.00	225. 185. 191. 223.
TE 06			ELEV 20	42 METERS T RATE 600 FPM	SOUNDING DATA INT		
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED	WND DIR	
000112NN3344556677888990011111	915 915 915 915 915 915 916 917 917 917 917 917 917 917 917	2378. 43378. 0132180. 0132110121. 0123110121. 0123110121. 0123110121. 0123110121. 0123110121. 01231100121	3111000122354454445A4453222	33665445555344334431235343	1919608148809C67285590614 556655466546566655444454	2999211852304576080093618 2998711852304576080093618 11999002223332225411118 122222222222222222222222222222222	



	COF CH	TRACT	ELEV 204	12 METERS	SOUNDI	NG ID 158
ATF 06	103/76	TIME 06:00	MST ASCENT	RATE 600	FPM DATA J	NTERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	0/T 0/ STD 300	T D/T M LAPSE	WS WD DEG
0.8 1.65 2.7 5.2 10.5 15.7 20.2	SFC 1500 4508 5558 1958 1958 2958	2192 2342 2500 2542 3000 4000 5000	17.20 17.66 17.20 16.00 16.04 12.00 -6.20	0 46 -0 0 46 -0 0 76 -2 0 40 -2 3 63 -2 9 60 -3 0 10 -3	0 16 66 95 95 -0.02 95 79 0.14 95 -0.35 -0.35	2.6 180. 4.6 121. 6.6 147. 8.6 166. 8.8 170. 10.0 197. 11.3 199.
ATE 06	COL CB /03/76		ELEV 204 MST ASCENT			NG ID 158 NTERVAL 15 SEC.
TIME	HEIGHT (AGL)	HEIGHT M (MSL)	M/S M/S	V-CUMP M/S	WND SPEEC	WND DIR DEG
050505050505050505050 0011223334455667788890001112	01334 9134 9134 914 914 914 914 914 914 914 914 914 91	235.689124 4321689124 6123499124 676548914 70222222222222222222222222222222222222	0255700175165436579508145 054530101150253202145	2134789 81111766778888980998	235.60 1 6 1 6 6 5 0 0 9 7 1 9 4 0 4 3 1 1 1 0 0 4 3 1 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 9 8 8 9 6 1 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 7 1 9 4 0 4 3 1 0 0 9 1 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 9 1 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 9 4 0 4 3 1 0 0 0 9 7 1 0 0 0 9 7 1 1 0 0 0 0 9 7 1 1 0 0 0 0 9 7 1 1 0 0 0 0 9 7 1 1 0 0 0 0 9 7 1 1 0 0 0 0 0 9 7 1 1 0 0 0 0 0 9 7 1 1 0 0 0 0 0 0 9 7 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	185543 181243 185543 18678885937 18099895 199809895 199809895 1998098995 199809895



				42 METERS		
ATE 06	0/03/76	TIME 12:00M	ST ASCEN	T RATE 600 FPM	DATA INTE	RVAL 15 SEC.
TIME	HEIGHT H (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T = D/T STD 300M	D/T LAPSE	WS WD
0.7		2192 2500 2500 2542 3000 4000 5000	18.20 16.21 15.23 13.42 7.30	0 0 0 -3 4 4 4 3 -5 58 -5 58 -5 54	-0.52 -1.55 -2.65 -4.62	7.7 7.6 219 11.4 208 10.4 201 9.9 200 10.0 195 6.5 184 20.7
-	COL CB	TRACT	ELEV 204	12 METERS	SOUNDING	ID 194
ATE 06	/03/76	TIME 12:00M	ST ASCENT	RATE 600 FPM	DATA INTE	RVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-CUMP M/S	WND SPFED W/S	NND DIR DEG
0001122534455566778889900505050	01611 91611	2042 201338 20135833 2016 2016 2016 2016 2016 2016 2016 2016	5609405863622880406848632 5354344123410001110022334	5942293690931508549829098 19918095122732111494150	73228728728264826006498413332 1129712274211114111111111111111111111111	221540 221540 2221000 2000 2000 2000 2000 2000 2000



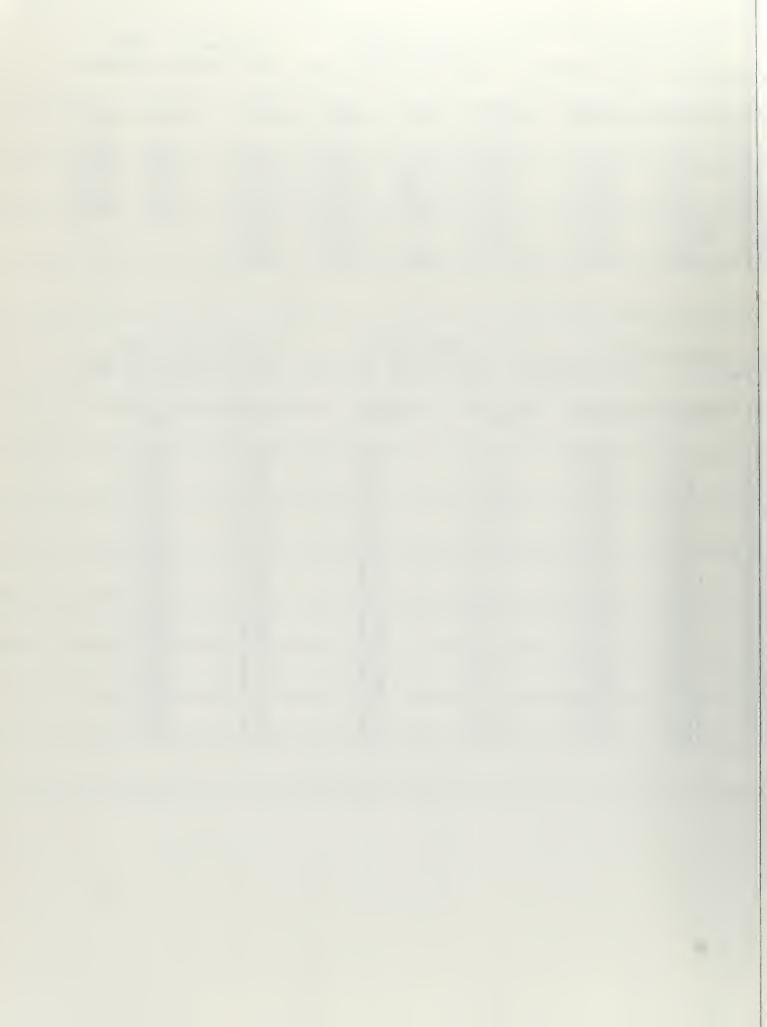
	CHF CB	THACT	ELEV 20	42 METERS	SUUNDING	ID 184	9
TE 0	6/05/76	TIME 06:00	MST ASCEN	T RATE 600 FP	M. DATA INT	ERVAL 15	SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	0/1 0/1 S10 300M	D/T LAPSE	ws m/8	HD DEG
0.8	SFC 150 300 458. 500 958. 1958.	2192 2342 2500 2542 3000 4000	M 			0.0 1.5 9.4 1.5 5.1 3.7	31. 95. 177. 172. 159. 194.
ITE 06	COL CB		FLEV 20 MST ASCEN	42 METERS I RATE GUU FPM	SOUNDING 1 DATA INT	*	· · ·
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-CUMP M/S	WND SPEED M/S	WND DIR	
050505050505050505050505050 0011222334455667788999001122	913. 1874. 1874. 1874. 1874. 1874. 1873. 1914. 1	2356 4356 4356 4356 4376 4376 4376 4499	0.0 -1.0 -0.6 -1.0 -0.5 -0.7 -1.1 -1.6 -2.3 -1.4 -1.8 -1.7 -0.6 -0.8 -1.7 -0.6 -0.8 -1.7 -0.6 -0.1 -0.6 -0.1	01.00 -1.00	0020517004945962369165071 0211042245365666531633434	31222. 1077	



					2		
	CUL CB	TRACT	FLEV 204	12 METERS	SHUNDIN	G JD 1926	
ATE 06	/05/76	TIME 12:0	OMST ASCENT	RATE 600 FPM	DATA IN	TERVAL 15 SI	FC.
TIME	HEIGHT M (AGL)	HEIGHT	TEMP DEG C	D/T D/T STD 300M	D/T LAPSE		WD EG
0.86350820	SFC 150 458 500 958 1958 1958 2958	2192 2342 2500 2542 3000 -4000 5000	18.20 16.84 15.10 13.70 13.33 10.00 -0.10 -12.80	0 0 1 36 -2 95 -3 44 -1 97 -3 33 -2 95 -3 12 -3 16 -3 12 -3 16 -3 16	-0.52 0.96 0.80 -0.02 -0.19 1.94 2.76	m r	61.
ATE 06	COL CB /05/76 HEIGHT M (AGL)	TIME 12:00	MST ASCENT	2 METERS RATE 600 FPM V=COMP	DATA INT	TERVAL 15 SE	
50505050505050505050 0112223344555667788899005050 111222334455566778889900505050	913 913 913 913 913 913 913 913 913 913	M (MSL) 3513134 3513143134 62344334 62344334 62344334 623445621 6234456222222222222222222222222222222222	M/S THE WIND DATA -10.1	S I S S S S S S S S S S S S S S S S S S	062818650198154390534300 456265545524591756665666	1683. 1534. 1534. 1663. 1655. 1663.	



	COL CB	TRACT	ELFV 20	42 METERS	SOUNDIN	G ID 1016
TE O	6/07/76	TIME 06:001	ASCEN	T RATE 600 F	PM DATA IN	TERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)		D/T D/T SID 300H	LAPSE	MS WD DEG
0.8646910.315.58	SFC 150 308 500 958 1958 *2490 *2958 *2958	2192 2500 2500 2500 4000 4532 4943 5000	=5.10 =7.50	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30 30 30 30 30 30 30 30 30 30 30 30 30 3	1.0 3.3 181 169 6.7 172 6.8 172 3.7 159 158
TE 06	COL CB 6/07/76 HEIGHT M (AGL)	TIME 06:001		T RATE 600 F	SOUNDING PH DATA IN WND SPEED M/S	TERVAL 15 SEC.
0.5050505050505050505050505050505050505	0 91 183 279 377 479 6093 785 876 967 1059	235191445789 0122124457891244289 0212345478901245675446289 02123454789011287766655446289 02123456789011287766655446289	1.000.6700.6700.6504.78888146.6544726	0049479793487525954262062	133366744434686284378100 1333667444346862843221222	270 181 181 164 177 173 186 174 173 186 187 187 186 187 188 189 189 189 189 189 189 189 189 189



	COL CB	TRACT	FLFV 204	42 METERS	SOUNDING	10 1006
ATE 06/	07/76	TIME 12:30	ASCENT	T RATE 600 FPM	DATA INT	ERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT (MSL)			D/T LARSE	
0.8 1.5 2.7 2.5 10.5 15.6	SFC 1300 4508 1958 1958 295	2192 2342 2500 2542 3000 4000 5000	20.00 18.61 17.80 16.81 13.10 -9.20	0 0 -1 94 -1 80 -1 64 -1 64 -1 64 -1 64 -2 46 -2 21 -0 49 -3 12 -3 28 -7 20 -3 12	1 · 12 1 · 29 1 · 29 0 · 47 2 · 44 - 0 · 19 - 0 · 35 - 0 · 19	3.6 225 2.1 183 1.6 170 2.6 160 2.8 164 3.0 218 8.6 206
ATE 06/		TRACT TIME 12:30M	_	12 METERS T RATE 600 FPM	SOUNDING DATA INT	
TIME	HEIGHT	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
05050505050505050505050 001120354455667788899001112	736. 827. 919.	2391235689124568912451258 4322109876689124568912455678658 22222222222222222222222222222222222	20000000000000000000000000000000000000	22211256:109609303073355006 2221122332221444547897877	6217379100274803383706427 32211223333322455658918877	2887566877653746568891221011886811008221011982210119822111999



	COL CB	TRACT	ELEV &	2042 METERS	SOUNDING	G ID 1024	
TE 06	/09/76	TIME 06:0	OMST ASCE	ENT RATE 600 FP	M DATA IN	TERVAL 15 S	EC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T SID 300M	D/T LAPSE	M/S D	WD EG
0.865772250	SFC 1500 4508 5088 1958 1958 2958	2192 2342 2500 2542 3000 4000 5000	18.30 16.89 15.70 14.50 10.00 -8.19	0.0 -1.41 -1.80 -1.14 -2.62 -1.04 -1.80 -2.30 -4.50 -3.77 -9.31 -3.12 -8.89 -1.48	1 · 12 · 0 · 30 · 1 · 12 · 0 · 63 · -0 · 68 · -0 · 68	11.0 2	70. 093. 095. 095. 020.
TE 06.	COL CB /09/76			2042 METERS .NT RATE 600 FP	SOUNDING M DATA INT	S ID 1024 TERVAL 15 S	EC.
TIME	HEIGHT M_(AGL)	HEIGHT M_(MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG	
05050505050505050505050 0001122235445566677888999005050	913 2370 4613 4613 4613 4673 879 1013 1123 123 123 124 1513 173 173 173 173 173 173 173 173 173 1	23562356891255886169168124 01234598766555886169168124 22222222222222222222222222222222222	7914517895709867371388808	0.791374164150886013164123 0.8034.07477788876663252445	7480480033836721425135534 1101488990000000000000000000000000000000	7004 7004	



	COL CB	TRACT	FLEV 20	42 HETER	S	SUUNDI	NG ID	528
TE 06	109/75	TIME 12:30	MST ASCEN	T HATE 6	00 FPM	DAŢAI	NTERVAL	15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C		D/T 300M	D/T LAPSE	ws m/s	WD DEG
0.7 1.2 2.1 2.3 4.8 10.1 14.9	SFC 150 300 4500 958 1958 2958 3958	2192 2342 2542 3000 4000 5000	19.03 17.40 10.00	-1.04 -1.30 -0.47 -1.63 -7.09 -9.31	0 · 0 -2 · 79 -2 · 62 -1 · 31 -1 · 31 -2 · 46 -5 · 25	0.14 0.30 1.62 1.62 1.62 1.62 0.47 -2.32	5.1 9.6 11.0 11.0 16.3 2.4 M	180 186 190 190 189 189 255 M
TE 06	COL CB /09/76		ELEV 20 MST ASCEN					528 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-CUMI M/S	Р	WND SPEE	D WND D	IR
05050505050505050505050505050505050505	91924 91924 91924 91924 91924 91176	23. 431. 431. 431. 457. 601. 6	0.349975024339219299330334 0.011102541339219299330334	5.39 9 10 11 18 19 15 16 18 17 17 10 10 10 10 10 10 10 10 10 10 10 10 10	1454896723579258754156730	1466016899501354202636436 1111895691730832822235	1881 1891 1895 1895 1895 1895 1895 1895	



	CUL CH	TRACT	ELEV 20	42 METERS	SHUNDING	ID 170	
= 06	/11/76	TIME 06:1	SMST ASCEN	T RATE 600 F	DM DATA JNT	FRVAL -15 SP	C.
IME	HEIGHT M (AGL)	HEJGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	D/T LAPSE	M/S DE	G
	SFC	2402	11.00	0.0	4 00	7.7 18	30.
1.2	- 300 - 300	-2192 2342	11.00 · -8.42 7.06	-2.58 -4.9 -1.36 -4.7	2 -1.99 6 -1.83	9.5	3.
7 27 87	458. 500	2500. 2542 3000.	/I • 8 /I	0.0 -4.9 -1.36 -4.7 -1.82 -5.2 -0.40 -5.2 -4.52 -1.9 -6.31 -3.6 -7.10 -2.1	-1.83 -2.32 -2.32 -2.96 -2.96	7.7 18 7.7 19 9.5 19 8.4 18 8.4 16 5.3 17	0,4
3:1-	958. 1958.	4000. 5000.	-0 10 -7 10 -15 10	-6.31 - 3.6 $-9.10 - 2.1$	-0.68	12.1	0.
1.1	2958 3958	6000.	-21.10	-6.00 -3.2	3 0.80 8 -0.35	M M	
	COL CB	TRACT	ELEV 20	42 METERS	SOUNDING	TD 170	
- 06				T RATE 600 F		ERVAL 15 SE	r
	,11,7/9	- 1111 <u>C</u> 00•1.	MALLE FORE	I WATE DOO'T	Pii DAIA INI		
IME	HEIGHT M (AGL)	HEIGHT M (MSL)	H-COMP M/S	V-CUMP M/S	WND SPEED	WND DIR DEG	
	0.	2042	-0.0	7.7		180	
050505050505050	91 254	2133.	1.7	5805743360561750 6986565566498788	7.59.53.8.643.6.0 7.69.8.8.5.65.5.6.6	195 189 201 142	
5	406	2448.	3.0 -5.1	8.0	8.5	201	
5.0	694 814	2736.	-0.9 -1.3	5.7	5.8	171.	
5.5	926.	2856 2968 3066	-0.6 -0.4	5.3	5.4	174	
5	1116	3158. 3249.	= 0 - 0	6.6	6.6	180	
5.0	1390	3158 3249 3341 3432	- 0 . 5 0 . 6	4.5	4.5	171 168 174 176 180 185 188 176	
50	1482	3524 3615	=0.5 -1.1	8 1	4 · 5 9 · 6 8 · 1 7 · 8	176	
5	1756	3707.	=2.4	8.5 8.0	8 • 8 - ···	164.	
5.0	1847	3889	-1.3	9.9	10.0	173.	
5.5	2034	4076	• 2 · 5	14.0	15.7	171.	400
5.5	2251.	4293	-1.1	11.4	11.5	174	
505050505	1947 1947 2034 2156 2251 2343 2434 2527 2637	3789 3891 4076 4193 4293 4476 44679	-1.35 -1.39 -3.18 -0.61 -0.6	8 · 0 9 · 9 11 · 1 14 · 0 16 · 3 11 · 4 11 · 7 10 · 3 10 · 8 14 · 9	10.0 11.3 15.1 16.6 11.5 11.7 10.3 10.8 14.9	173 170 171 169 174 176 176 180 182	
2.5	2637.	4679	0.6	14.9	14.9	išž.	
		***	Marie Marientopi, Ma		VAN-16/00	Se savier	



		COL CB	TRACT	ELEV 2	1042 METE	.R \$	SOUND	ING ID	0	
0	ATE 06	/11/76	TIME 12:00	MST ASCE	NT RATE	600 FPM	DATA	INTERVAL	15 SEC.	
	TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	DEG	
	0.865726598	\$FC 1500 4508 5058 5958 *2878 *2958 *2958	21400 1400 1400 1400 1400 1400 1400 1500	10.80 9.80 9.00 8.04 52.20 -10.90 -10.79	-0.98 -0.02 -1.36 -0.40 -2.73 -7.10 -8.79	000664223288	2.29 0.30 0.80 0.30 0.30 2.40 4.35	10.38 10.35 14.55 18.53 MM	180. 182. 176. 170. 165. 168.	
		COL CB	TRACT	ELEV 2	042 METE	RS	SOUNDI	ING ID	0	
D	ATE 06	/11/76	TIME 12:00	MST ASCE	NT RATE	600 FPM	DATA 1	INTERVAL	15 SEC.	
	TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V=C0	MP S	WND SPEE	ED WND D	IR	
	0 0	0	20/12	-0.0	1.0	7	10 3	180		

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TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
N 05050505050505050505050505050505050505	M (A 9134679 0 1234679 0 1234679 0 1234679 0 1234679 1234677 1234677 1234677 1234677 1234677 1234677 1234677 1234677 1234677 1234677 1234677 1	M 0123499124 M 0123449914 M 0123449987456 M 0123449987456788783 M 0222222222222222222222222222222222222	9 01933901559784605404865 00000324698457588421025404	M/ 07-49107-697-8719-0354725-6	8 3949421560368097657542 M 0722761189282398669106	DE 18744 • • • • • • • • • • • • • • • • • •
11.0	2024. 2125. 2250.	4066 4167 4292	-0.5 -1.1 -1.6	16 6 25 3 22 5	16.6	176 178 176



COL CB	TRACT	FLEV 204	2 METERS	SOUNDING	G ID 0
ATF 06/13/76	TIME 06:00M	ST ASCENT	RATE 600 FPM	DATA INT	FRVAL 15 SPC.
TIME HEIGHT	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	D/T I APSF	
\$FC 150 1.3 300 2.0 458 2.2 500 4.7 958 10.1 1958 15.3 2958	2342 23542 25542 3000 4000	12.80 10.85 -8.89 7.30 -7.34 -4.00 -3.30 -9.50	1.95 1.96 1.15 1.15 1.15 1.23 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	-1.50 -0.19 0.63 0.63 0.30 -1.50	2.6 6.5 8.9 191 12.0 6.6 8.2 12.8 207
COL CB	TRACT	FLEV 204	2 METERS	SOUNDING	ID 0
ITE 06/13/76	TIME 06:00MS	T ASCENT	RATE 600 FPM	DATA INT	ERVAL 15 SEC.
TIME HEIGHT	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
0 0 0 0 1 23647 9 1 23647 9 1 2 3	233691235649 437691235649 122445678912332110998765134 222222222233333333333333333333333333	656721024340132400713114628489 221120125334444545555766660375	051392317197746221848984743579 05701103467788981000002232000209 1110346778898111111111111111111111111111111111	602512476866735433261828419925 1020348789909211121121244442311	20139044789555566660866956716561 20189490400000000000000000000000000000000



COL	CB TRACT	ELEV	2042 METERS	SOUNDIN	e ID 0
TE 06/13/76	6 TIME 12	OOMST ASC	ENT RATE 600 F	PM DATA IN	TERVAL 15 SEC.
TIME HEIGH	GHT HEIGHT	TEMP DEG C	D/T D/T STD 300M		
0.6 1.0 1.7 1.9 4.0 9.3 14.8	2192 2342 2500 2542 2500 2542 3000 4000	17.80 14.47 11.23 5.80 2.69	-3.58	6 -1.83 -0.35 -0.19 -0.19 -0.68 2.93 3 0.80	10.3 270. 6.4 197. 9.5 193. 8.0 191. 7.4 190. 11.1 185. 7.6 199.
TE 06/13/76	TIME 12:	OOMST ASC	2042 METERS ENT RATE 600 F V=COMP	PM DATA IN	TERVAL 15 SEC.
TIME HEIG	(L) M (MSL)	M/S	M/S	M/S	DEG 270.
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	M SL 23 4 4 2 3 4 4 5 7 8 8 8 9 9 9 4 4 2 3 4 4 5 7 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	10121100350024M817466774548259	049860012300721406619733023 04986001118000721406619733023 1100790018861566477	10.55400023301932740339919261 10.5987001932740339919261 11.80009963576570	199 1993 1999 1772 1877 1873 1873 1873 1893 1993 1993 1993 1993 1993 1993 199



	COL CB	TRACT	FLFV 20	42 METERS	SOUNDING	10 127
ATE 06	5/15/76	TIME 06:15	SMST ASCEN	T RATE 600 FPM	DATA INT	FRVAL 15 SEC.
TIME	HEIGHT (AGL)	HEIGHT M (MSL)		D/T D/T STD 300M	D/T LAPSE	WS WD DEG
0.8 1.65 2.7 7.8 10.7 16.1 21.5	\$FC 1500 3058 5958 *1417 1958 *14958 395	21920 213040 213040 21302 21302 21002 21000 21000 21000 21000	m 75 . 44 f)	0 0 1 45 1 03 1 21 2 13 2 14 2 15 2 16 2	0.80 0.80 0.80 0.30 3.09 3.09 3.047 -0.35	0.0 1.5 98. 47. 2.4 3.8 351. 3.8 356. 8.2
	601 60	* D.6*		// 2 / T. T. D. O.	00111172115	
175 04	COL CB		ELEV 20		SOUNDING	
ILE UD	0/15//6	11ME 00:12	MST ASCEN	T RATE 600 FPM	INT ATAI	PRVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
0505050505050505050505050 00111223334455566778889900005050	914 1006 1097	23.56.6	0545154806508810851457703 051111000100001001001464MNNSS	0912343439980244413864390 	08497435499814777771548897 01111233443335766568677828	0060993773671623 28534544555554444201820278 35345333333333333333333333333333333333



	TIME 12:30 HEIGHT (MSL) 2192 2342 2500 2542 3000	TEMP DEG C 10.80 7.90 6.60 6.60 24.90	D/I D/I	DATA IN D/T LAPSE -0.52 1.12 0.47 -0.02 0.80	G ID 439 TERVAL 15 SEC. WS WD DEG 1.5 90 1.2 583 1.4 100 1.5 100 1.5 298
TIME HEIGH MIN M (AGL	TIME 12:30 THEIGHT (MSL)	ELEV 20 MST ASCEN U-COMP M/S -1.5	V-COMP M/S	WND SPEED	TERVAL 15 SEC. WND DIR DEG 90.
0 0 0 0 1 1 9 1	33.35.69.46.78.35.56.79.46.78.79.66.88.96.76.55.35.56.79.96.79.99.99.99.99.99.99.99.99.99.99.99.99.	012110001000134564543322	0663131443657554878717438 000000011115650000111001300	1012110111156545564543432	47 682 101 101 145 1687 11543 1687 1181 1222 1222 1235 1035

)



	601 55	* D A C *	mi mi. Do	#3 uk 7500	0.0111.0	
				42 METERS		
TE O	6/17/76	TIME 06:1	SMST ASCEN	T RATE 600 FPI	1 DATA IN	TERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)		D/T D/T STD 300M	D/T LAPSE	
0.8 1.6 2.5 7 5.2 10.6 16.0 21.5	\$FC 300 450 450 450 458 5958 1958 2958	2192 2342 2500 2542 3000 4000 5000	3 5 6	0 0 0 1 80 30 12 30 12 12 12 12 12 12 12 12 12 12 12 12 12	1.12 0.63 0.63 0.63 -0.19 -0.02 2.27 0.47	0.5 0.9 101 198 244 3.9 270 4.5 291
				42 METERS T RATE 600 FPM		
TIME	HEIGHT M (AGL)	M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
050505050505050505050 1001122233344556667778889990	3657 367 367 367 300 300 300 300 300 300 300 30	23568912456255438017279 2223449912456255432217279 2222244566255432217279 2322244566255432217279	-0.58.84.55.3.0 -0.00.14.24.43.22.23.1.07.09.0	034033350992517728496 000000000035	59908060796N85N851091	90 119 1192 1214 1240 124



TE	COL CB 06/17/76			42 METERS		S ID 2747 TERVAL 15 SEC.
TIM		HEIGHT M (MSL)		D/T D/T STD 300M	0/1	MS MD M/S DEG
20.	8 150 300 458 5 458 7 500 958 1958 0 2958 7 3958	2192 2342 2500 2500 4000 5000 6000	12.00 10.92 9.91 8.30 8.00 5.30 -4.80 -11.99 -20.20	0.0 -1.08 -1.01 -2.79 -1.61 -2.30 -3.30 -3.00 -3	1 · 29 0 · 14 0 · 63 0 · 47 -0 · 02 -1 · 50 0 · 96	7 2 . 6 90 . 1 . 0 66 . 1 . 0 3 . 1 . 1 62 . 1 . 1 47 . 2 . 7 346 . 296 .
TE (COL CB 06/17/76		FLEV 20	-		ERVAL 15 SEC.
TIM	HEIGHT M (AGL)	HEIGHT M (MSL)	H-COMP M/S	V-CUMP M/S	WND SPEED M/S	WND DIR DEG
0011122233344556677888990000000000000000000000000000000	0 913469 913469 9137469 9137469 9137467 91374679 11198 1198	2356 4356 432168 121009 8475 8776 87	6989796685684391101596373 200000000000000000000000000000000000	0000001130001351103 0000001130001351103	6290712013507227453822503 2101011123223333433443344475	90 90 90 90 90 90 90 90 90 90 90 90 90 9



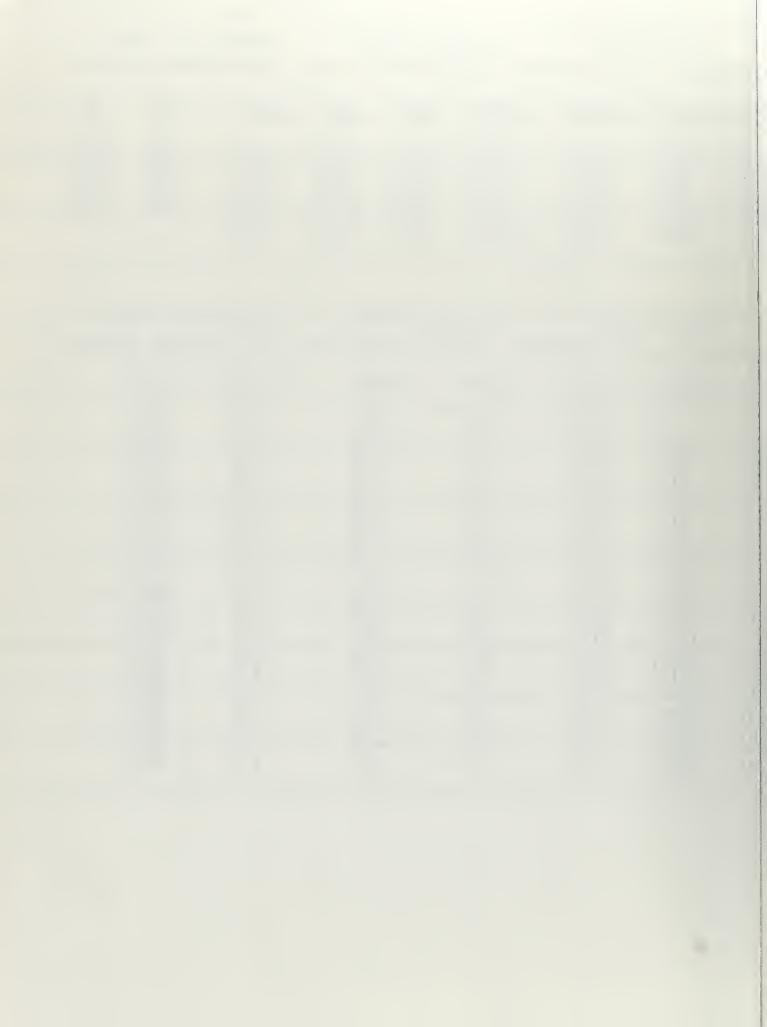
	001 00	***************************************	F. F 7		0.0111.6.	- 15 13 Tu 4
				042 METERS		
ATE UO	/19//6	TIME UBIOUR	ST ASCE	NT RATE 600 FPM	DAIA IN	IERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C		D/T LAPSE	MS MD DEG
0.7 1.0 2.1 2.1 4.3 9.8 14.9 20.4	SFC 1500 4500 4508 5958 1958 1958 239	2192 2342 2500 2542 3000 4000 5000	18.16 15.20 15.20 12.00 10.00	-3.04 -4.10 -0.94 -3.77 -1.51 -3.77 -0.66 -2.13 -5.51 -2.46 -9.00 -1.48 -2.50 -0.33	-1 .17 -0 .84 -0 .84 -1 .01 0 .80 0 .47 1 .45	0.0 1.0 1.6 1.8 1.8 1.8 1.8 1.91 2.7 2.37 3.0
ATE 06				042 METERS NT RATE 600 FPM		
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	H-COMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
05050505050505050505050 001122233445556677888990050505050	0 916575744 998912356899124525685530 998812356899124525685530 112356899112345688 11236689112345688 11236689112345688 11236889112345688 11236889112345688 11236889112345688 11236889112345688 11236889112345688 11236889112345688 11236889112345688 11236889112345688 11236889112345688 1123688911235688 1123688911235688 1123688911235688 1123688911235688 1123688911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 112368911235688 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123689112368 1123688 1123689112368 11	23.87.979.66.01.887.979.66.01.887.979.66.01.889.075.23.445.678.90.12.35.678.90.12.31.078.075.22.22.22.23.33.33.33.33.33.33.33.33.33.	000000012221211212123222333344	0.67 1.88 0.76 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0675890304 <u>8120702652782512231</u>	07310 19810 19810 19923



cur ca	TRACT EL	EV 2042 NET	ERS S	DUNDING ID	2743
re 06/19/76	TIME 12:00MST	ASCENT RATE	600 FPM D	ATA INTERVA	L 15 SEC.
IME HEIGHT	HEIGHT TEM	C STD	0/T 0/ 300M LAP	T WS	DEG
5FC 150 150 300 458 500 958 1958 1958	2192 2342 2500 2500 17 2542 17 3000 4000 5000	98 -3.02 -1.26 -1.21 -0.68 -4.62 -7.30 -8.90	. 0 . 0 -2 . 62 -3 . 44 -3 . 44 -4 . 26 -2 . 62	30 652 20 552 30 30	6 270. 7 293. 1 299. 1 308. 7 310. 305. 255.
CUL CB	TRACT EL	EV 2042 METI	ers s	OUNDING ID	2743
	TIME 12:00MST				
TIME HEIGHT	HEIGHT H-CO	MP V-C	JMP WND	SPEED WND	DIR EG
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2133 2281 2281 2372 2372 22561 22661 22676 22799 23936 23076 33076 33076 3309 33109 33109 33109 33509 3509	665911177460282636677974348	000216812907817380456393126	22233333333333333333333333333333333333	7990011958821543402037172215



	CUL CB	TRACT	ELEV 2	042 METERS	SOUNDIN	G ID 2745	
ATF 06.	/23/76	TIME 06:00	MST ASCE	NT RATE 600 FPM	DATA IN	TERVAL 15 S	SEC.
TIME	HEIGHT (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T S1D 300M	D/T LAPSE	ws m/s	WD EG
0.8	SFC 1500 34500 508 5958 1958 2958	2192 2300 2500 2500 2500 3000 5000	9.30 75.84 4.13 0.80 -7.60 -13.29	0 0 -1 . 69 -1 . 77 -1 . 33 -2 . 79 -3 . 33 -8 . 30 -6 . 40 -6 . 40 -1 . 64 -1 . 64	-1.17 -1.66 0.14 -0.02 1.29 1.29	3.64	270. 316. 305. 306. 327.
TE 06/		TIME 06:00M	ELEV 20 MST ASCEN U-COMP M/S	042 METERS NT RATE 600 FPM V=COMP M/S		TERVAL 15 S	SEC.
000112223344556667778889900505050505050505050505050505050505	0150 9950 9950 13457 8099 876654 11265	2377227902846795679028679028012 223222222333333333222212 2222222233333333	35331110011001011115NAN116000009884	01224774105B575552009812122677	3444030563350975095866078786019 344401010010101000000000000000000000000	0.563653662034159602150888865349 771563653662034159602150888865349 233333333333333333333333333333333333	



	COL CB	TRACT	ELFV 204	12 METERS	SOUNDING	3 ID 2740	
.E (06/23/76	TIME 12:0	OMST ARCENT	RATE 600 F	PM DATA INT	TERVAL 15 SE	С.
IME	HEIGHT M (AGL)	HEIGHT	TEMP DEG C	0/T 810 300M	DIT	M/S DE	G
0.62	SFC 150 458 300 500 958 1958	2192 2500 2342 2542 3000 4000	19.90 16.00 12.70 13.07 12.53 8.80	0.0 -7.5 -3.2 -3.2 -3.2 -3.7 -3.2 -4.4 -3.2	4 -4.62 -0.35 8 -0.35 -0.50 -0.19	9.4	1.00.11.
E 0	COL CB		ELEV 204			G ID 2740 PERVAL 15 SE	C.
IME	HEIGHT M (AGL)	HETGHT M (MSL)	U-COMP M/S	V-CUMP M/S	WND SPEED M/S	WND DIR DEG	
0.5050505050505050505050505050505050505	01 96544 76545333588 970278 112378 112378 112378 112378 1123796 123467 1	231166755557 0114196755557 011419677801402368918383 22222223333333333444444444444444444	1029301450688666610562294 -110011450688666610562294	0308334476899798627646145	16 68 045 78 2346 109 27 29 73 66 53084342533334110112221011	270 360 13 14 359 14 15 15 17 30 31 31 31 31 31 31 31 31 31 31 31 31 31	



	CHL CB	TRACT	ELEV 20	42 METERS	SOUNDING	10 2746
06	125/76	TIME 06:00	OMST - ASCEN	T RATE 600 F	PM DATA INT	TERVAL 15 SEC.
ME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	DIT	WS WD DEG
8646821	\$FC 150 458 450 450 958 1958	2192 2500 2500 2500 4000 5000	15.50 13.03 10.63 10.63 -1.00 -8.69	0 0 -3 1 -1 40 -1 41 -2 9 -0 60 -4 79 -6 24 -7 70 -5 2	2 -0.19 0.14 -0.02 -1.01 0.14 1.78 -2.32	2.6 2.9 2.9 2.19 2.19 2.17 2.11 2.28
	COL CB	TRACT	FIFV 20	42 METERS	SOUNDING	ID 2746
06						FRVAL 15 SEC.
ME	HEIGHT M (AGL)	HEIGHT M (MSL)	U#CNMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
050505050505050505050505050505	01 1989 1989 1989 1989 1989 1989 1989 19	23.61.28 43.361.28 43.361.29 43.33.21.29 67.8654.32 67.8654.32 67.866.02 67.	88067466968M10M362291144910004	893402258305436189704885122107 113454667454452430132230012641	614704247081434310062964920018 223465778555573441233462243087	2090069097297242822432651272309 20101109729011122909111223587272309 2212222222222222222222222222222222222



	601 60	-1) A C -	F1.5.1. 70.0	2 4 7 1 4 2	palubrue.	ID 2744
. = = 0.4				2 METERS		
ATE US	/25//5	11ME 12:00	191 ASCENI	RATE 600 FPM	DATA INT	EKVAL 15 SEL.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	U/T LAPSE	WS WD
2.0	SFC 150 3458 450 958 1958 2958	2192 2342 2500 2542 3000 74000	15.07	1.76 1.38 1.27 0.76 4.24 8.50 7.10	-1.17 -1.17 -1.66 -1.83 -0.02 0.80 -0.19	10.3 180 165 10.2 175 10.8 180 11.4 179 4.9 193 7.9 226 10.1 230
			_	2 METERS		
ATE 06	/25/76	TIME 12:00M	ST ASCENT	RATE 600 FPM	DATA INT	ERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
05050505050505050505050505050505050505	01919 69 69 17229 013457 89 112369 013457 89 112369 013457 80 134 67 80 8 77 65 67 78 67 87 67 67 87 6	231318181894412356790235689020 012356788876703335679023565489020 01235678890124567890 22222222333333333333344444444444444444	02200817781552694242817668253079	383088840574056748445330583045 10600000094746770034555569648966	335286982575965363922485399432 107000882575965363922485399432 110229474677774567666738888190	1009 107676767676051179646277660511797888808663327964467972861 12187898663327964467972861



	COL CB	TRACT	ELEN SU	42 METERS	SHUNDING	ID 2742
06	/27/76	TIME 06:00	MST ASCEN	T RATE 600 FPM	DATA INT	ERVAL 15 SEC.
IME 11N	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	D/T LAPSE	WS WD
865727	SFC 150 300 458 500 958	2192 2342 2500 2542 3000 4000	17.50 16.64 15.99 14.00	0.0 -0.86 -1.97 -0.64 -1.65 -2.95 -0.32	0.96 1.12 -0.02 -0.02	1.5 1.8 2.6 2.03 2.04 2.04 2.04 2.12 2.48
. 06	COL CB /27/76			12 METERS I RATE 600 FPM	SUUNDING DATA INT	
ME	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-C(3MP M/S	WND SPEED	WND DIR
05050505050505050505050	0 1834 4679 1234 1454 1097 11237 112	23568912456891245689124457 0123449876543321098912457 222222222233333333333334444	1001111111230233345445454745	1473793443587611215456869	5595926769387865597495548 11122355344444445555555755	20000000000000000000000000000000000000



					SOUNDING	
DATE 06	/27/76	TIME 12:00MS	T ASCEN	T RATE 600 FPM	DATA INT	ERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T D/T STD 300M	D/T LAPSE	MS MD M/S DEG
0.8 1.6 2.7 5.0 9.7 14.9	SFC 150 300 458 500 958 1958	2192 2342 2542 3000 4000	21.50 0.04 19.02 17.00 17.05 11.90 2.60	0 0 -1 46 -2 30 -1 02 -2 30 -1 48 -3 12 -0 49 -3 12 -4 72 -3 44 -9 72 -2 62 -6 71 -1 64	0.63 0.63 -0.19 -0.52 0.30 1.29	5.1 225 237 2239 2239 223 223 238 24.7 218
DATE 06				42 METERS T RATE 600 FPM		ID 2736 ERVAL 15 SEC.
TIME	HEIGHT M (AGL)	HEJGHT (I-COMP M/S	V-COMP M/S	WND SPEED	WND DIR DEG
050505050505050505050 001122334455667788899001112	01 1874 913 1276 10 10 10 10 10 10 10 10 10 10 10 10 10	23568925250000224994235 011234999999000123249941235 0112344567800123249942356 011234456785441235	6024444777953875757644661 322222222222222222222222222222222222	3112222235047294435043697	1492257224795690369097357	156199441119810894390936982 22222222222222222222222222222222222



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R: 1976.	NORMAL 1ZED 7-10		5055 5550		ccc	0 0	0.0	RENCE DE	0.0	FRUI A SA
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		TIITAL		00000			0.0	0.0			
500 METERS		41	7 70000	00000					0.0		NOT HAVE
SFC TO	IBUTION	-	XC000	00000			0.0	0.0	CLASS IS		OLINDINGS OID
CH TRACT	NEY DISTRI	TFR/SEC)	• • • •	00000		• • •	0.0	0.0	STABILITY		25 SOUN
כטר כ	ZED FREGUENC	SPEED (ME				• • •	0 • 0	0.0	THE B		AMPLE OF
AR: 1976.	NORMALI	7-10	' • • • •	00000		• • •	0.0	0.0	CICCHPRENCE OF	0.0	FROM A SA
¥ F)		4-4			• • • •	• • •	0.0	0.0	0 %	Y OF CALM	DUNDINGS TAND DAT
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500 METERS		<	u rioc	• •	• • •	• •	• • •)))))	•		0.0		NOT HAVE
SFC TO	TRIBUTION	-	T C C		• • •			0000	• •	0.0	CLASS IS		SOUNDINGS DID
CB TRACT	NCY DIS	TER/SEC)	• •		• • •		• • •	0000	• •	0.0	STABILITY		SS SOUN
0 700	FREQUE	SPEED (ME 0 11-16	• •	• •	• • •		• • •	0000	• •	0.0	THE C		AMPLE UF
AR: 1976.	NORMALIZED	7-10	• •		• • •		• •	0000	• •	0.0	RENCE OF	0.0	FROM A S.
>		7-7	• •		• •		• •	0000	• •	0.0	Y OF OCCURRE	Y OF CALM	BOUNDINGS WIND DAT
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NOM		DIRECTION	Z1	n Z Z W W	m n n n n m		3 3 3	232 322	Lau	TOTAL	RELATIVE	RELATIVE	SOO M OF



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CY DISTRI	FR/SEC)	0000					0.0	TABILITY	,	
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NORMAL IZED	7-10	0000		• • • •		• •	0.28	NEF OF THE	0.0	
Z	4 - 6	cccc	cccc		• • •	• •	0.32	F OCCURREN	F CALM 0	
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500 METERS		∢ u	r 100	• •			• •	• •		•	* *	0 0		NOT HAVE
9FC 10	STRIBUTION C)	-	100 100	• •	• • •	• •	• •	• •		•	0.0	CLASS 18		SOUNDINGS DID
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כטר כו	FREQUEEEU CM		• •	• •	000	• •	• •	• •	000	0 0	0 0	THE E		MPLE OF
R: 1976.	17	7-10	* • •	• •	000		• •	• •	• • •	0.0	0.0	ENCE OF	0.0	FRIDM A SAN
¥ F. A		4 • 6	• •	• •	000	• •	• •	• •	• • •	0.0	0.0	OF UCCURR	UF CALM	UNINGS
MONTH: JUNE		Û - 3	• •	• •	000	• •	• •	• •	• • •	0 0	0 0	FREQUENCY	FREQUENCY	EMP AND WIN
HINCH	DIRECTION		Ш ZI ZZ:	ម មា <u>ភ</u> ភពព	ரால லரா வ	വ ഗഗ സ	ა გეგა გეგა	1 3 7 2 1 3 3	3 3 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	AVG SPEED	TOTAL	RELATIVE F	RELATIVE F	A TOTAL UF SOO M OF TEMP

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כטו" כ	ZED FREGUENC	SPEED (ME		00000			0.0	0.0	THE F		MPLE OF
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YFA		4=6		00000 00000	• • • • •		0.0	0.0	/ OF OCCIIR	OF CALM	SHUNDINGS WIND DATA
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MONT		DIRECTION	2 Z Z W	നന്നയയു യനയ ബന്ധ	の王の	3 3 237 322	AVG SPEED	TOTAL	RELATIVE	RELATIVE	SOOM OF



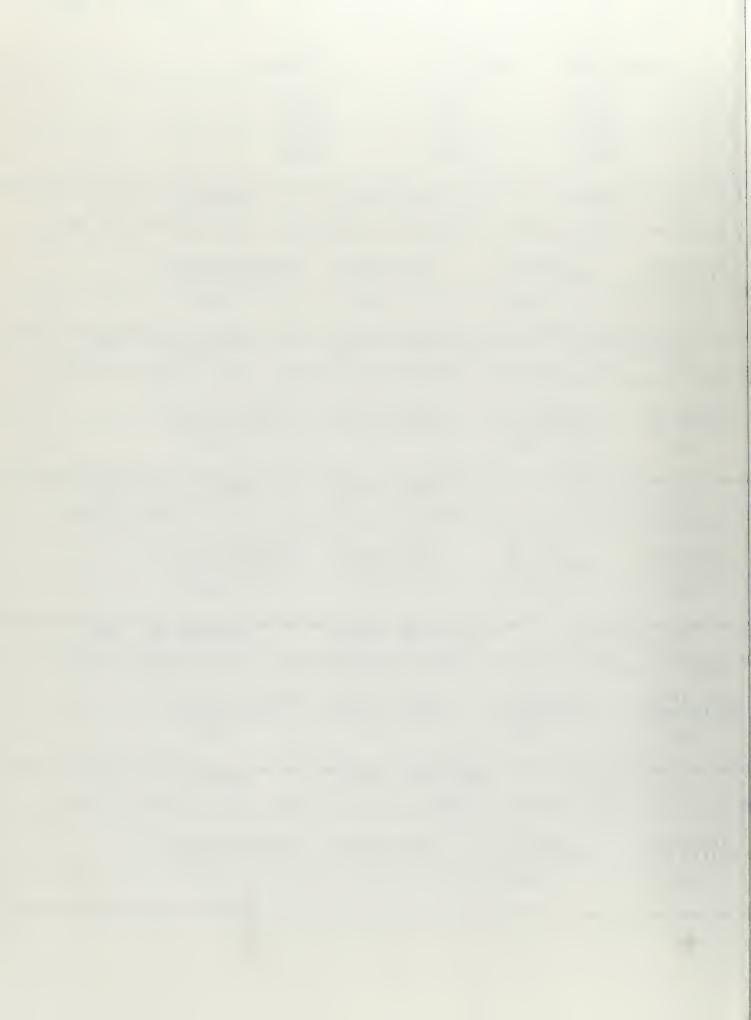
	TOTAL	330 00000 00000	200000 204-43		0 • 0	1.00		,	
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SFC TO	GREAT	100000 (1			0 • 0	0.0	TIY		aid sanidnugs
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MONTH	DIRECTION	ZWZ	ന വാധയായ വാധയായ വാധയായ	3 3 3 0 232 33322	AVG SPEED	TOTAL	الفا	RELATIVE F	A TOTAL OF SOO H OF TEMP



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ELEV 2042 METERS
       COL CR TRACT
                                                       SOUNDING ID 1794
TE 06/01/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
        THERE ARE NO INVERSION BASES WITHIN OM UP THE SEC
          LAYER BASE
                          LAVER TOP
                                              DT/DZ
                          METERS AGE (DEG C)/100M
          METERS AGL
                                100.
                100.
                               250.
               250.
               500.
                               750.
                                              -0.0H
                                              -1.07
                               1000.
              1000.
                              1500.
                                              -0.90
                      ELEV 2042 METERS SOUNDING ID 1846
       COL CB TRACT
TE 06/01/76 TIME 12:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
        THERE ARE NO INVERSION RASES WITHIN 1500M OF THE SEC
          LAYER BASE
METERS AGL
                          LAYER TOP DI/DZ
METERS AGL (DEG C)/100M
                .0.
                               100.
               100.
                                              -0.65
-0.85
                               250.
                               750.
               750.
                                              -0.87
-0.80
                              1000.
              1000
                              1500.
                      ELEV 2042 METERS
       COL CB TRACT
                                                      SOUNDING ID 158
                              ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
             TIME 06:00MST
TE 06/03/76
 INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M
                       183.
                                        0.27
                                                          0.0
                           ELEV 2042 METERB
                                                      SUUNDING ID 194
      COL CB TRACT
TE 06/03/76 TIME 12: NUMST ASCENT RATE 600 FPM
                                                     DATA INTERVAL 15 SEC.
        THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SEC
          LAYER BASE
METERS AGL
                          LAYER TOP
                                     (DEG C)/100M
                               100.
                                              -1.13
-1.08
               100
                               250.
               250.
500.
750.
                               500.
                                              -0.94
                               750.
                                                .00
                              1000.
              1000.
                              1500.
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COL CB TRACT
                             ELEV 2042 METERS
                                                     SUUNDING ID 1926
NATE 06/05/76 TIME 12:00MST
                              ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
         THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SEC
           LAYER BASE LAYER TOP
                                             DIVUZ
           METERS AGL
                         METERS AGL
                                      (DEG C)/100M
                               100.
                                             -0.71
                100.
                               250.
500.
                                             -0.03
-0.06
                250.
                500.
                              750.
                                             -0.66
                750.
                              1000.
                                             -0.90
-1.08
                              1500.
               1000
       COL CR TRACT
                      ELEV 2042 METERS
                                                    SOUNDING ID 1016
MATE 06/07/76 TIME 06:00MST ASCENT RATE 600 FPM
                                                    DATA INTERVAL 15 SEC.
  INV BASE INV TOP INV DI/DZ DT/DZ HELOW INV METERS AGL METERS AGI (DEG C)/100M (DEG C)/100M
                        46.
                                       0.0
                                                        0.0
           ***********
       COL CB TRACT ELEV 2042 METERS SOUNDING ID 1096
ATE 06/07/76 _TIME_12:30MST ASCENT_RATE 600 FPM DATA INTERVAL 15 SEC.
  INV BASE INV TOP INV OT/DZ OT/DZ BELOW INV METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M
                     233.
                                       0.0
      187.
                                                       -1.07
       COL CB TRACT
                      FLEV 2042 METERS
                                                    SOUNDING ID 1024
MATE 06/09/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
  INV BASE INV TOP JNV DT/DZ DT/DZ BELOW INV METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M
      370.
                     416.
                                      0.0
                                                      -0.95
       COL CB TRACT
                     ELEV 2042 METERS SOUNDING 1D 528
ATE 06/09/76 TIME 12:30MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
  INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV METERS AGL (DEG C)/100M (DEG C)/100M
      535.
                     581
                                     0.0
                                                      -1.21
       COL CB TRACT ELEV 2042 METERS SHUNDING ID 170
TATE 06/11/76 TIME 06:15MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
            1NV TOP INV DT/DZ DT/DZ BELOW INV METERS AGL (DEG C)/100M (DEG C)/100M
    INV BASE
  METERS AGL
     1162.
                                     0.0
                                                      -1.03
                    1207.
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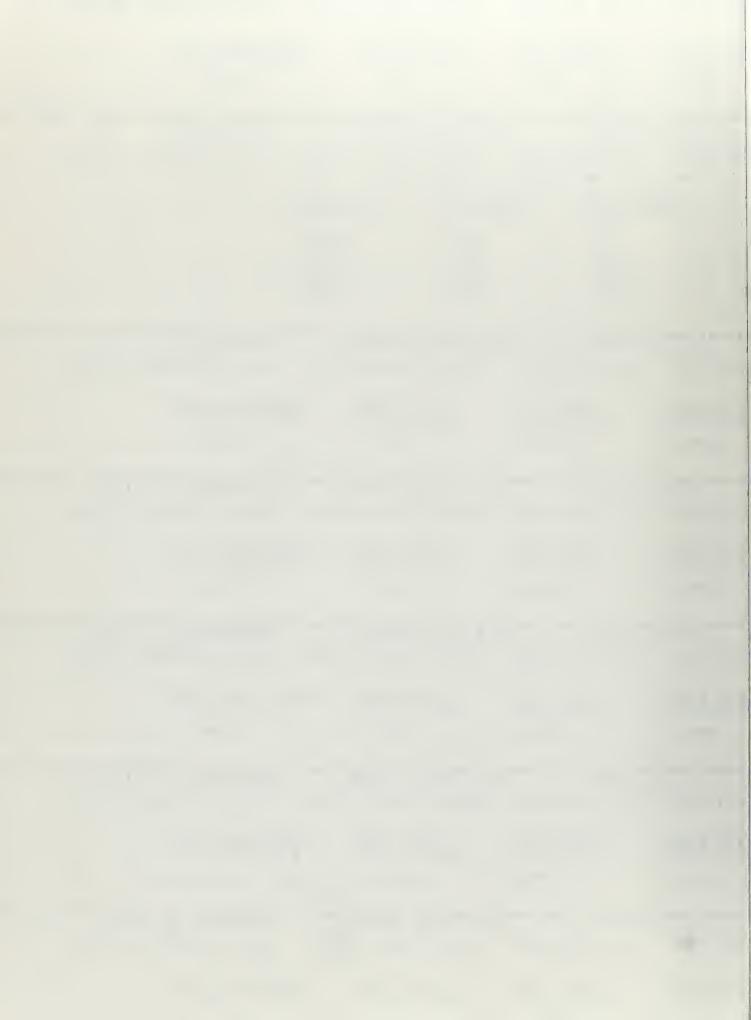


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TE 06/11/76 TIME 12:00MST
                         ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
 INV TOP INV DIVOZ DIVOZ BELOW INV METERS AGL (DEG C)/100M (DEG C)/100M
     183.
                   320.
                                 0.0
                                               -0.55
TE 06/13/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
      THERE ARE NO INVERSION RASES WITHIN 1500M OF THE SEC
        LAYER BASE
METERS AGL
                     LAYER TOP
                     LAYER TOP DT/DZ
METERS AGL (DEG C)/100M
                          100.
            100.
                          250.
                                      -1.07
             250.
                                      -0.83
                          500.
             500.
                          750.
                                      -0.71
            750.
                         1000.
           1000.
                         1500.
     COL CB TRACT ELEV 2042 METERS
                                             SOUNDING ID 0
TE 06/13/76 TIME 12:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
 INV BASE INV TOP INV DI/DZ DI/DZ BELOW INV METERS AGL (DEG C)/100M (DEG C)/100M
   1358.
                 1/149
TE 06/15/76
           TIME 06:15MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
 THE BASE INV TOP INV DI/DZ DT/DZ BFLOW INV METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M
  1234.
            1463.
                                0.22
                                              -0.72
***********
     COL CB TRACT ELEV 2042 METERS SOUNDING ID 439
TE 06/15/76 TIME 12:30MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
         INV TOP TOUR DT/DZ BFLOW INV METERS AGE (DEG C)/100M (DEG C)/100M
  INV PASE
 METERS AGL
    290.
                 335.
                                0.0
                                              -1.00
     SOUNDING ID 1173
TE 06/17/76 TIME 06:15MST
                        ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
 INV BASE INV TOP INV DIVOZ DT/DZ BELOW INV METERS AGL (DEG C)/100M (DEG C)/100M
                   46.
      0.
                                0.0
                                               0.0
 COL CB TRACT ELEV 2042 METERS SOUNDIN
                                            SOUNDING ID 2747
TE 06/17/76 TIME 12:00MST ASCENT HATE 600 FPM DATA INTERVAL 15 SEC.
 INV RASE INV TOP INV DI/DZ DI/DZ HELOW INV METERS AGL (DEG C)/100M (DEG C)/100M
     91.
        ____137.
                                0.0
                                              -1.09
```

ELEV 2042 METERS

SUMBLIFE ID 0

LUE LE TRALI



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COL CH TRACT
                       ELEV 2042 METERS
                                                SOUNDING ID 2741
 ATE 06/19/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
   INV RASE INV TOP TOUR DT/DZ BELOW INV METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M
                                             (DEG C)/100M
      171.
                    246.
                                   0.0
 ATE 06/19/76 TIME 12:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
        THERE ARE NO INVERSION BASES WITHIN 1500M UP THE SEC
          LAYER BASE
                        LAYER TOP
                                         DT/nZ
                        METERS AGI (DEG C)/100M
          METERS AGL
                            100.
                                         -2.74
               100.
                                         -0.76
-0.82
                            500.
              500.
                                         -1.08
                           1000.
                                         -1 · 0 1
-0 · 77
              1000.
                           1500.
       COL CB TRACT ELEV 2042 METERS SOUNDING ID 2745
HAIE 06/23/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
  INV BASE INV TOP INV DT/DZ DT/DZ BELOW INV METERS AGL METERS AGL (DEG C)/100M (DEG C)/100M
      947.
                     993.
                                    0.0
DATE 06/23/76 __ TIME_12:00MST ASCENT RATE 600 FPM __DATA INTERVAL 15 SEC.
        THERE ARE NO INVERSION PASES WITHIN 1500M OF THE SEC
          LAYER BASE LAYER TOP DT/DZ METERS AGL METERS AGL (DFG C)/100M
                            100.
              100.
                            250.
              250.
                            500.
              500
750
                            750.
                                         -0.94
                           1000.
                                         -0.98
             1000.
                           1500.
       COL CB TRACT ELEV 2042 METERS
                                                SOUNDING ID 2746
DATE 06/25/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
  INV BASE INV TOP INV DT/DZ DT/DZ BFLOW INV METERS AGL METERS AGI (DEG C)/100M (DEG C)/100M
    -1050.
                   1095.
                                   0.0
                                                  -1.02
      ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.
DATE 06/25/76 TIME 12:00MST
        THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SEC
         LAYER BASE LAYER TOP DT/DZ
METERS AGL MFTERS AGL (DEG C)/100M
                            250.
                            500.
```



DATE 06/27/76 TIME 06:00MST ASCENT RATE 600 FPM DATA INTERVAL 15 SEC.

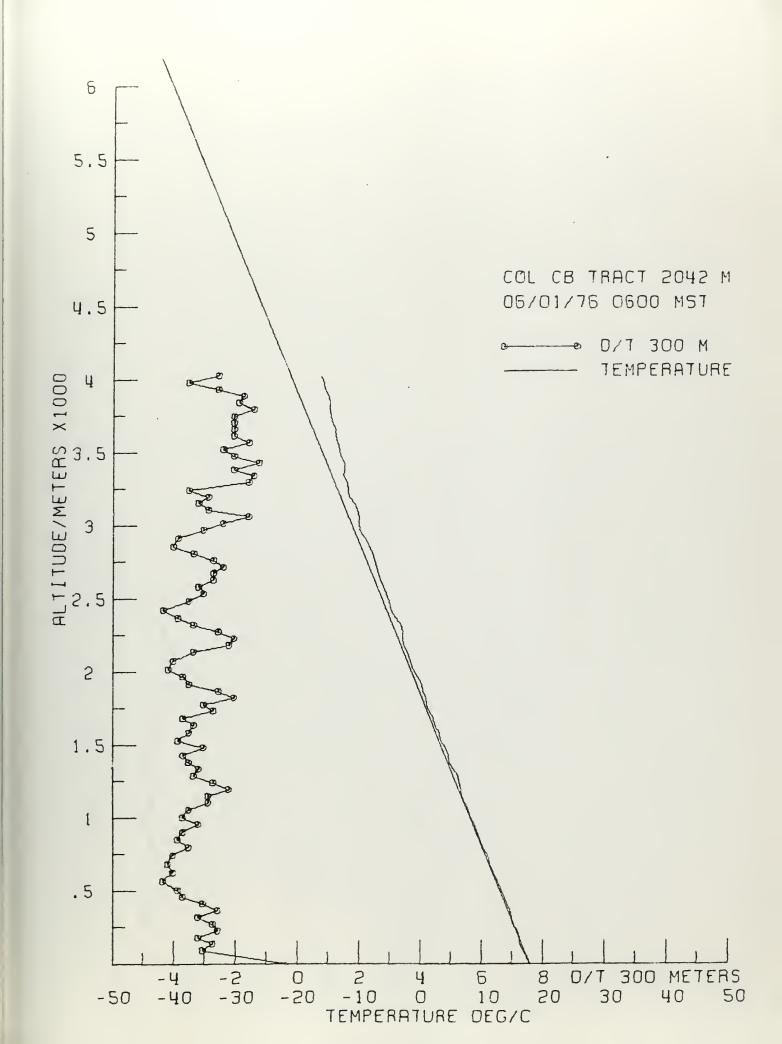
THERE ARE INSUFFICIENT DATA WITHIN 2000M OF THE SEC.

CUL CB TRACT FLFV 2042 METERS SOUNDING ID 2736

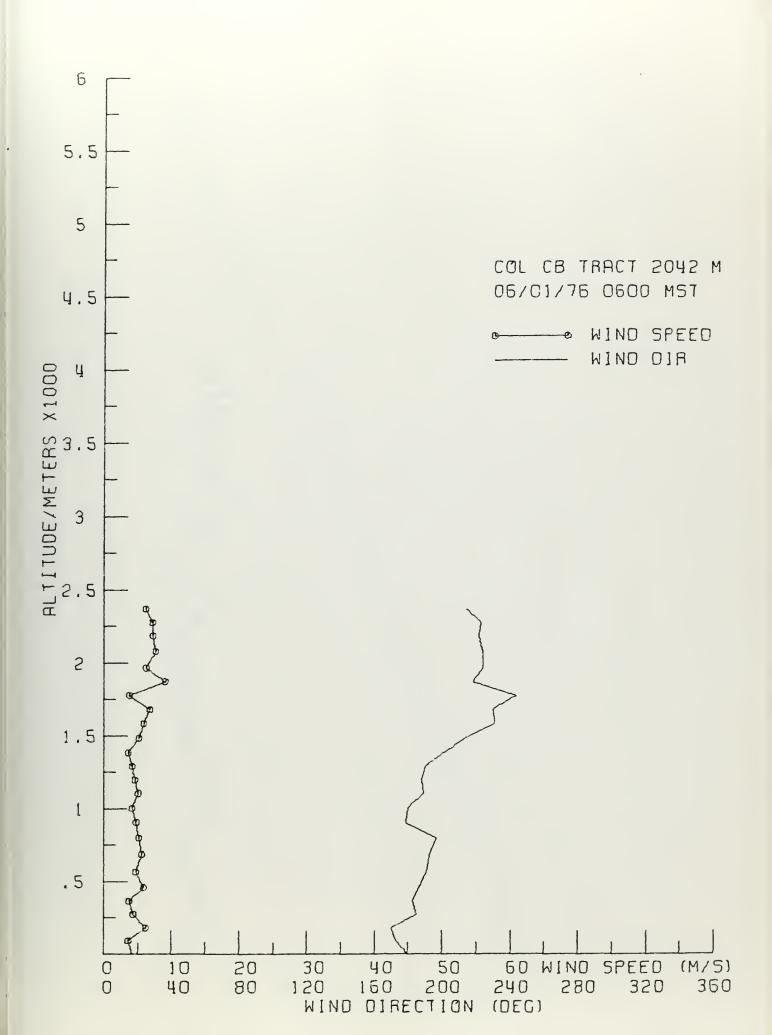
DATE 06/27/76 TIME 12:00MST ASCENT RATE 600 EPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL INV DT/DZ DT/DZ BELDW INV DETERS AGL (DEG C)/100M (DEG C)/100M

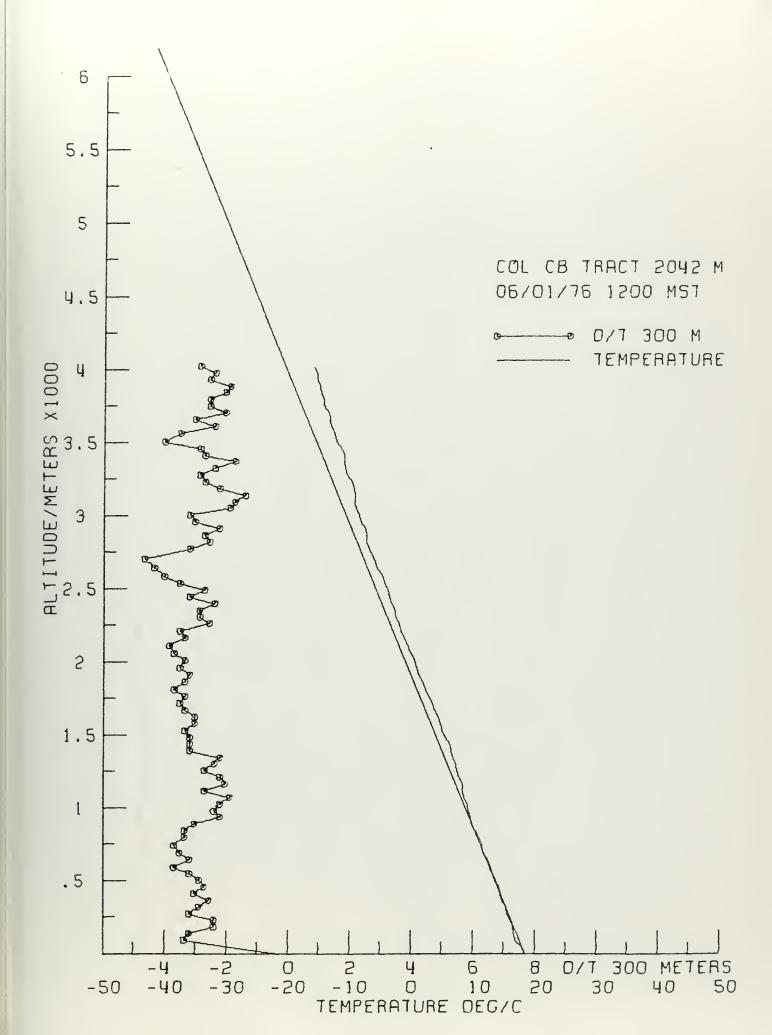




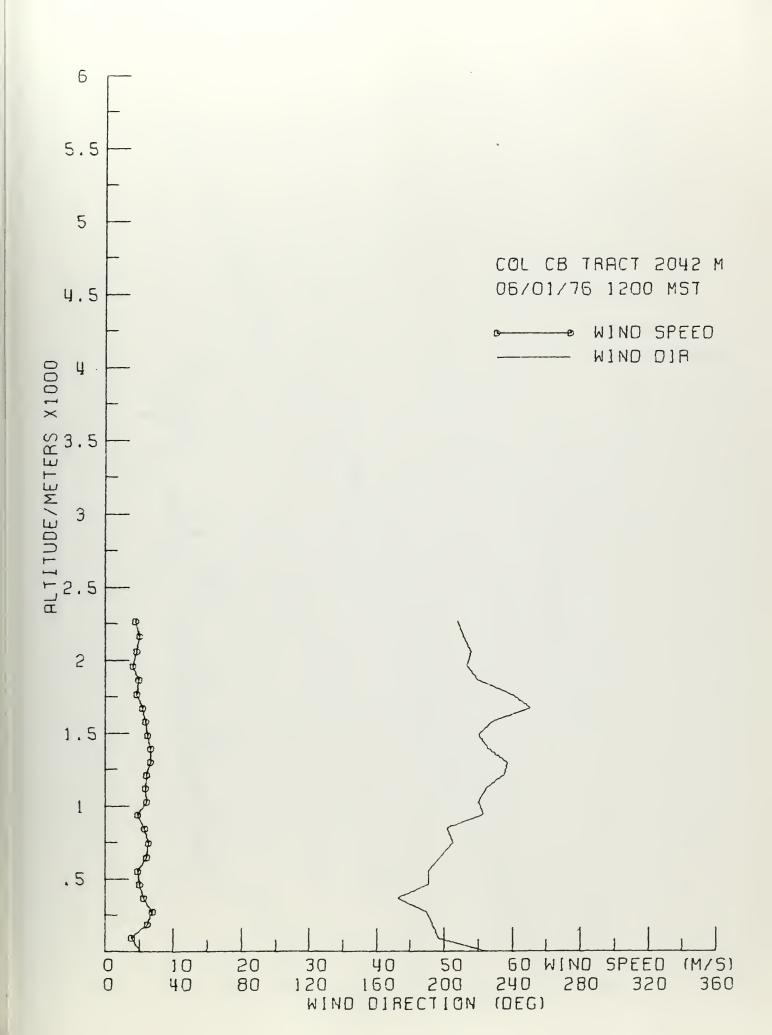




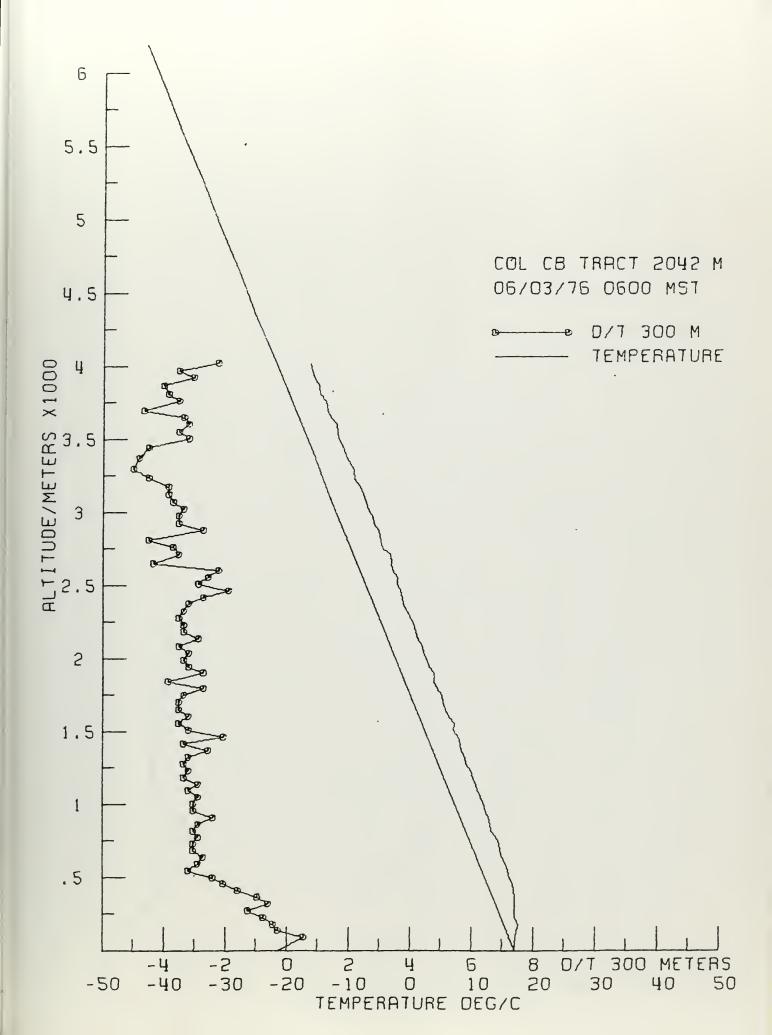




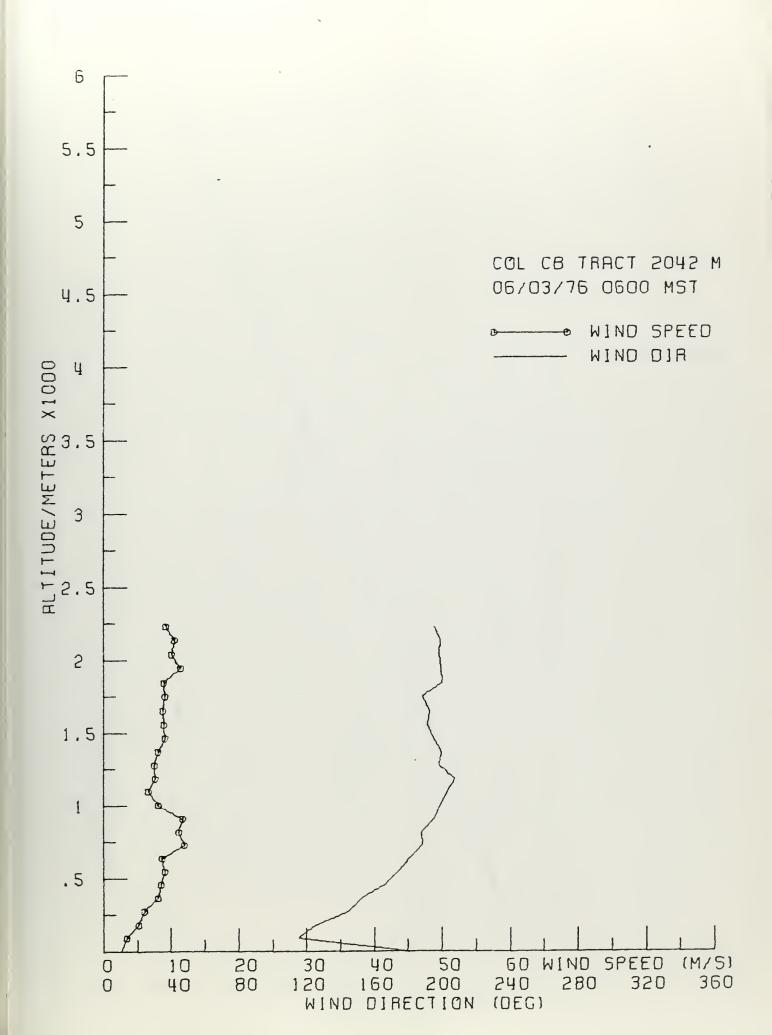




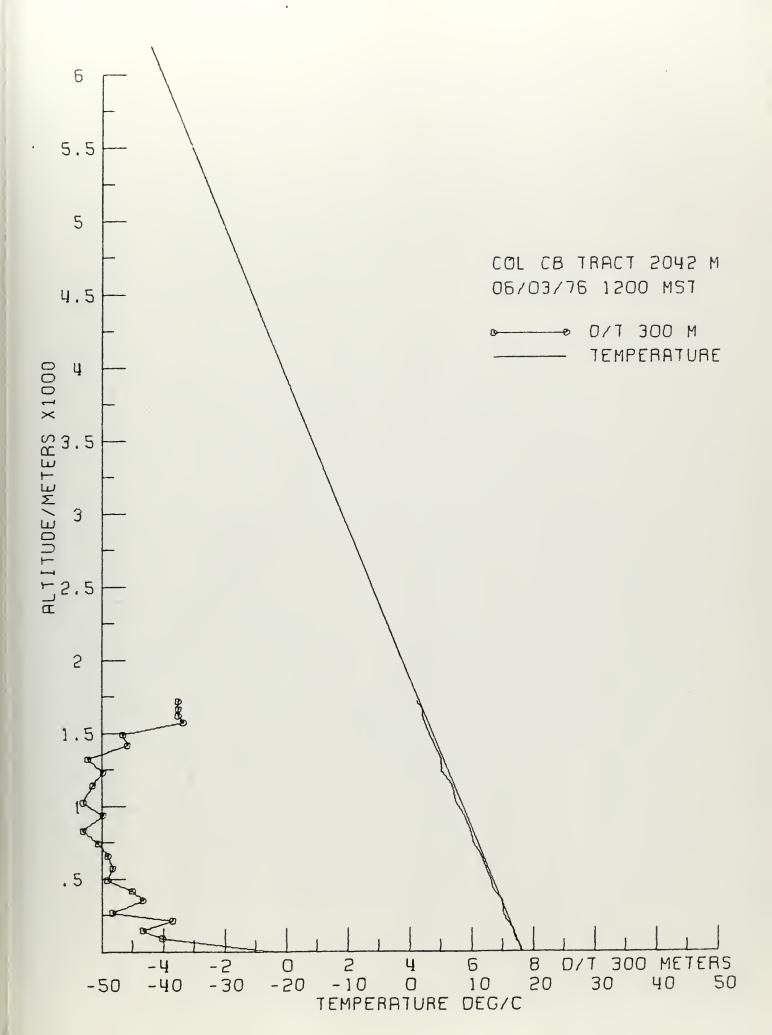




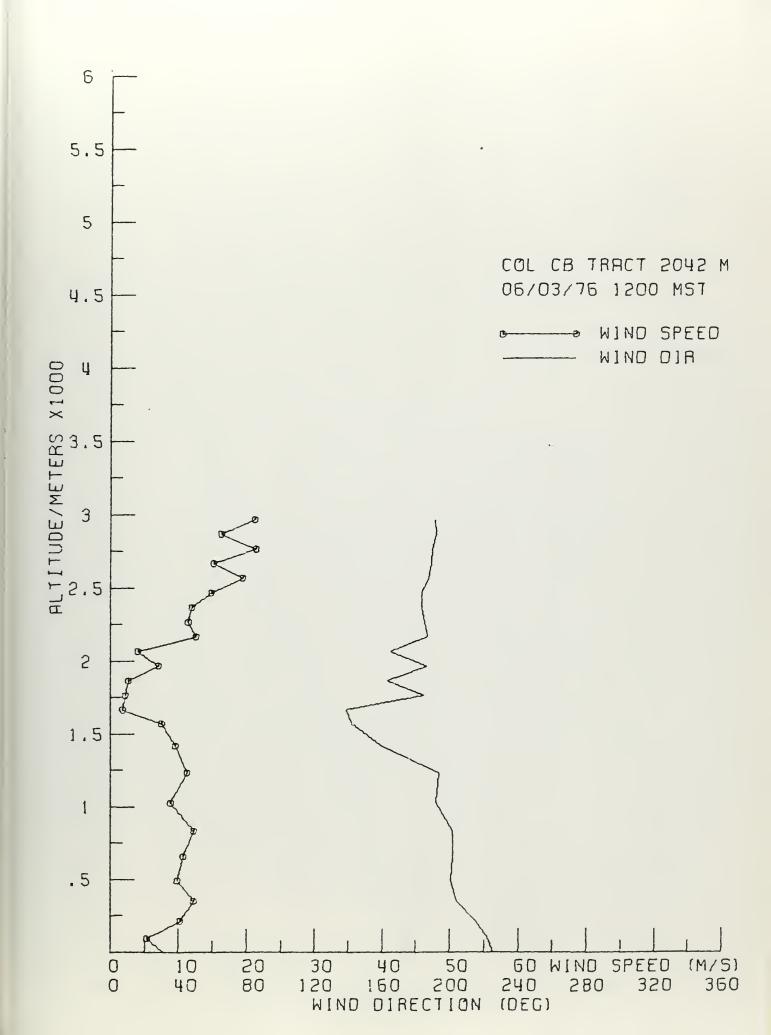




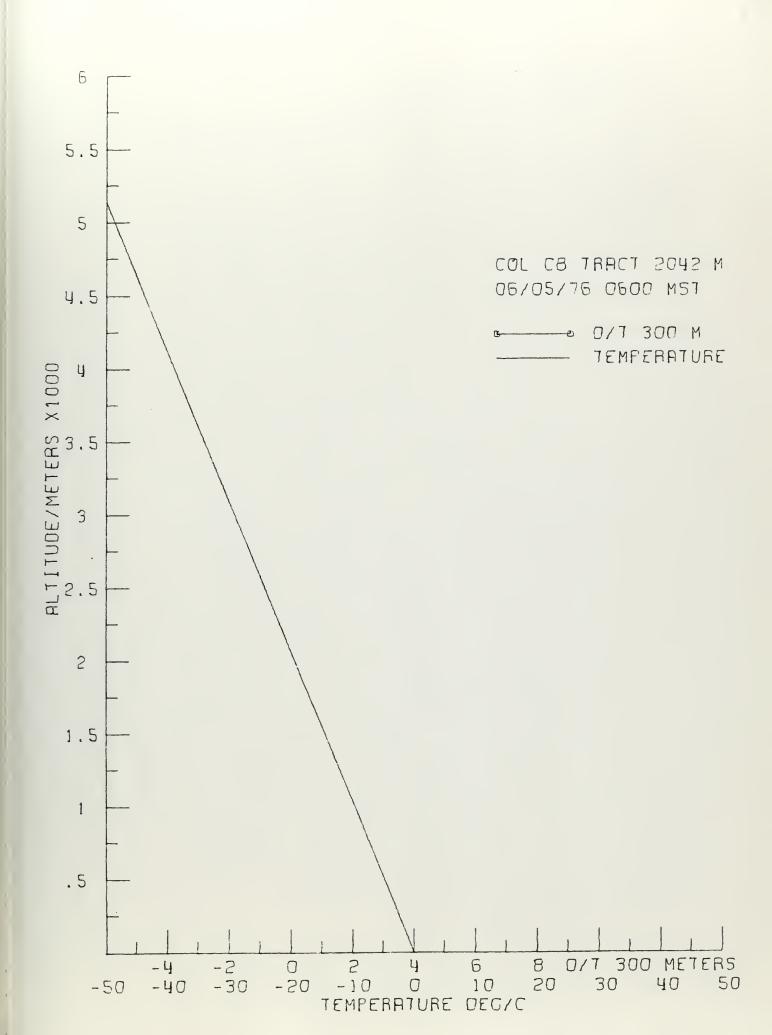




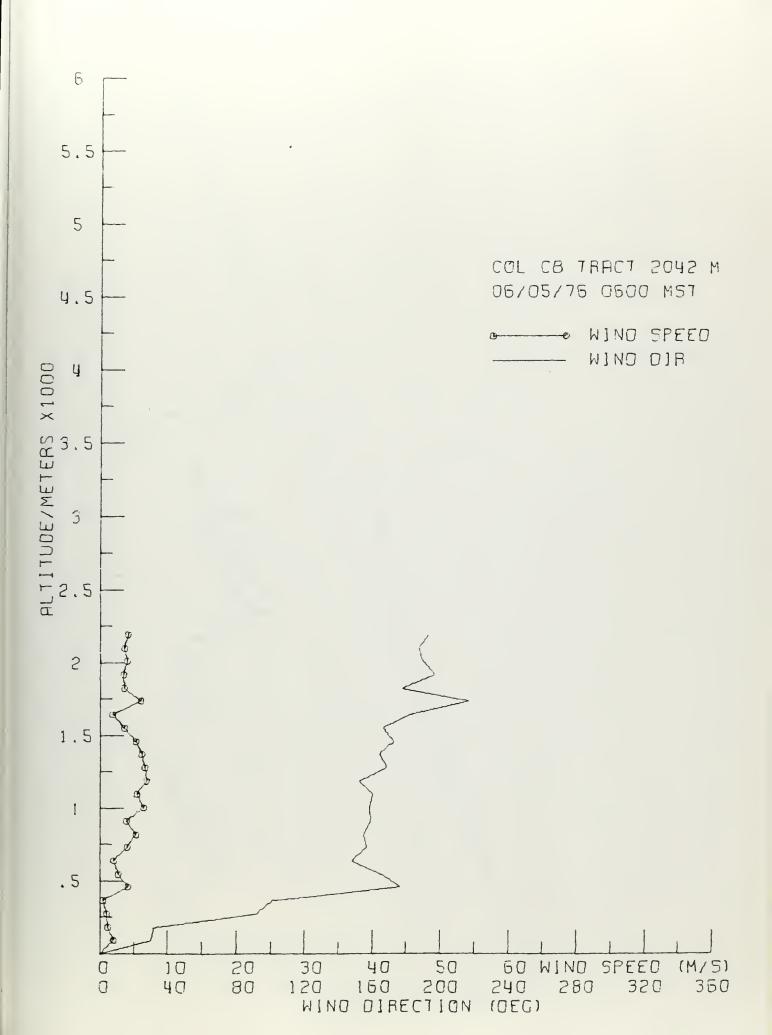




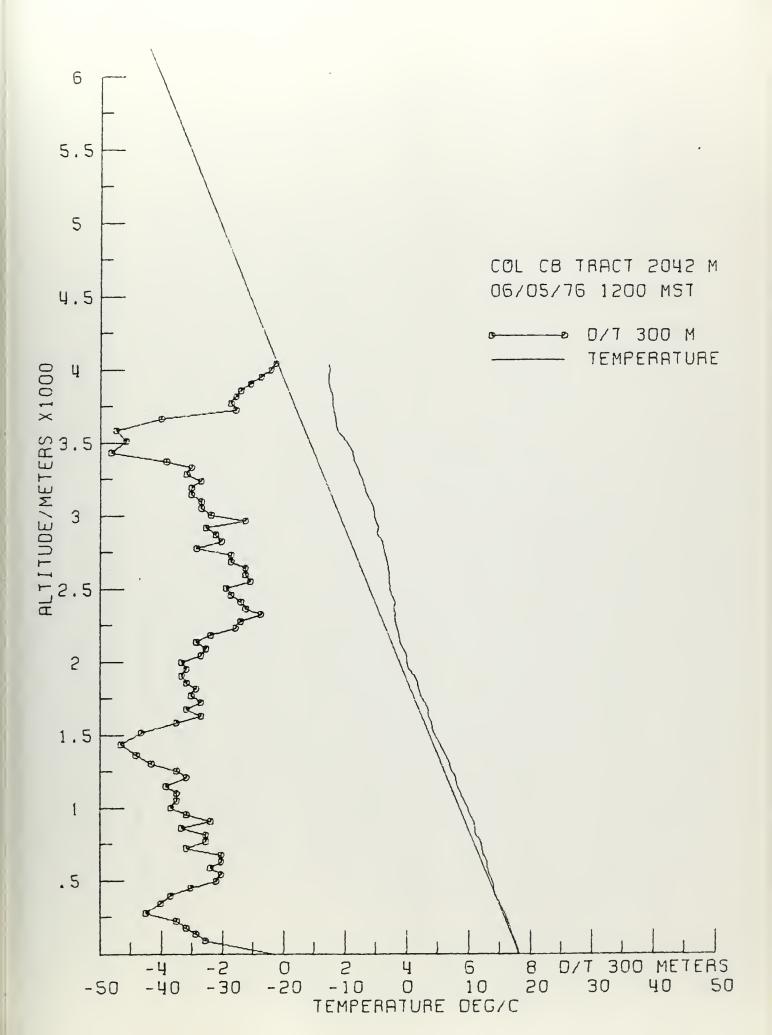




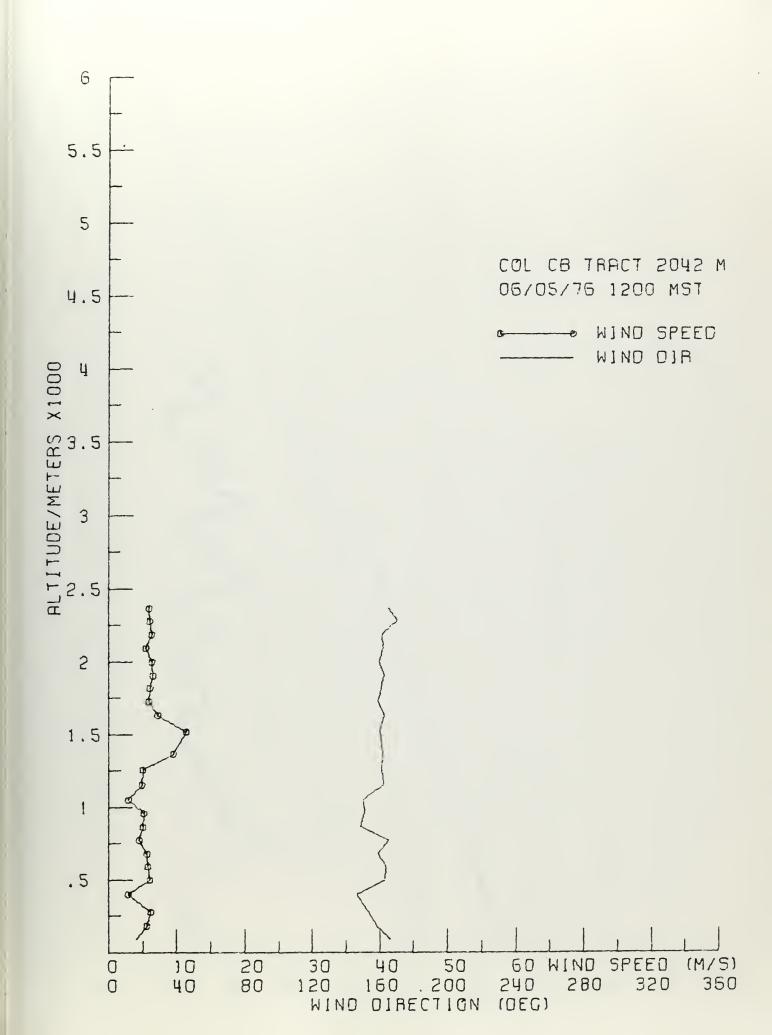




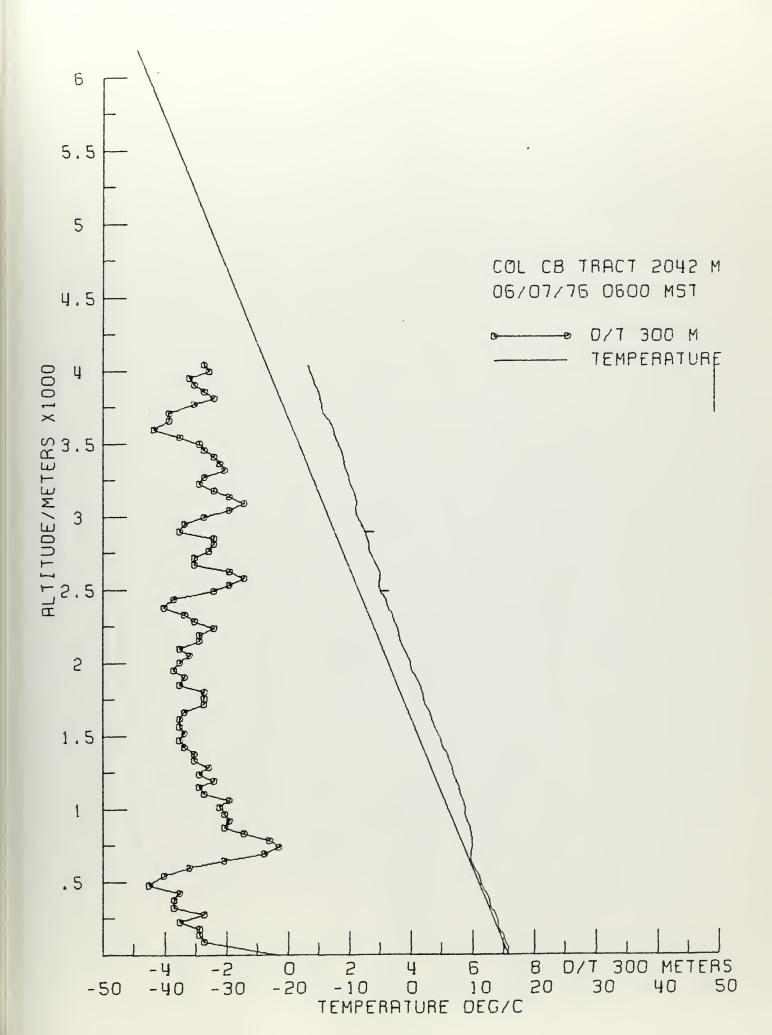




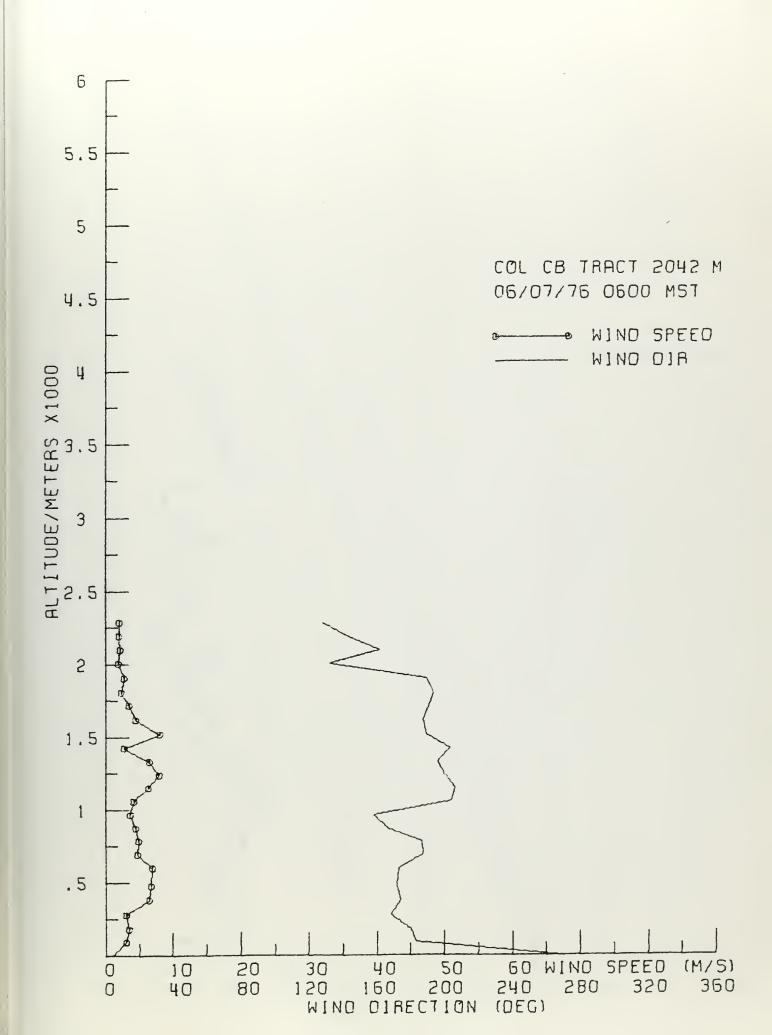




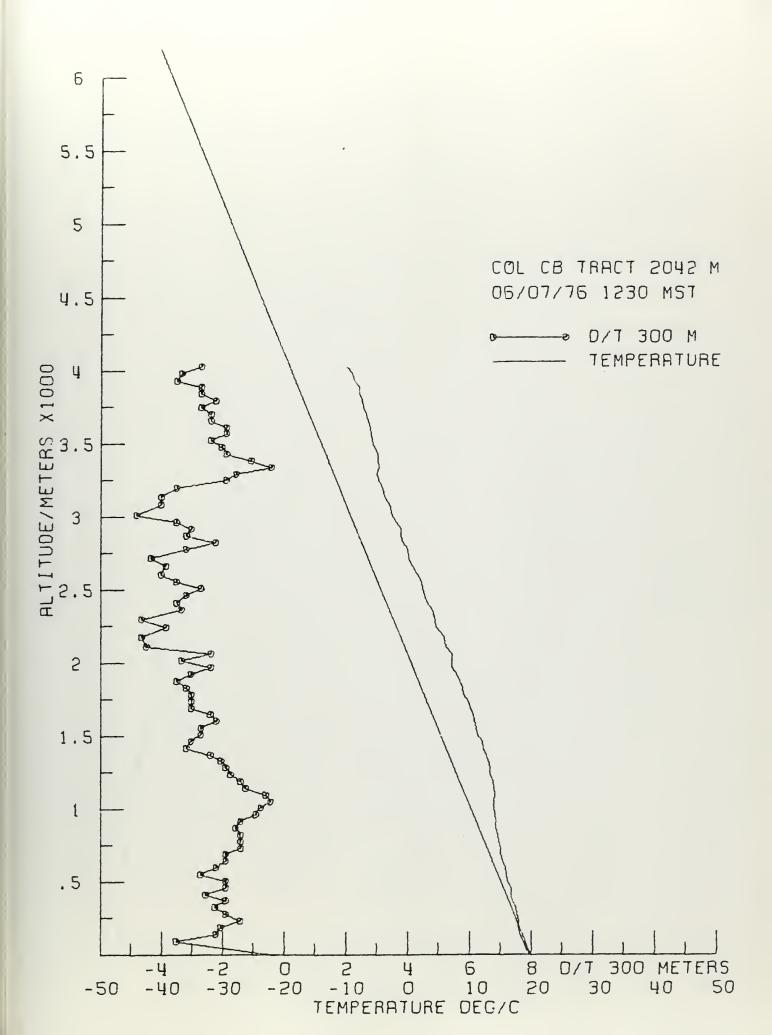




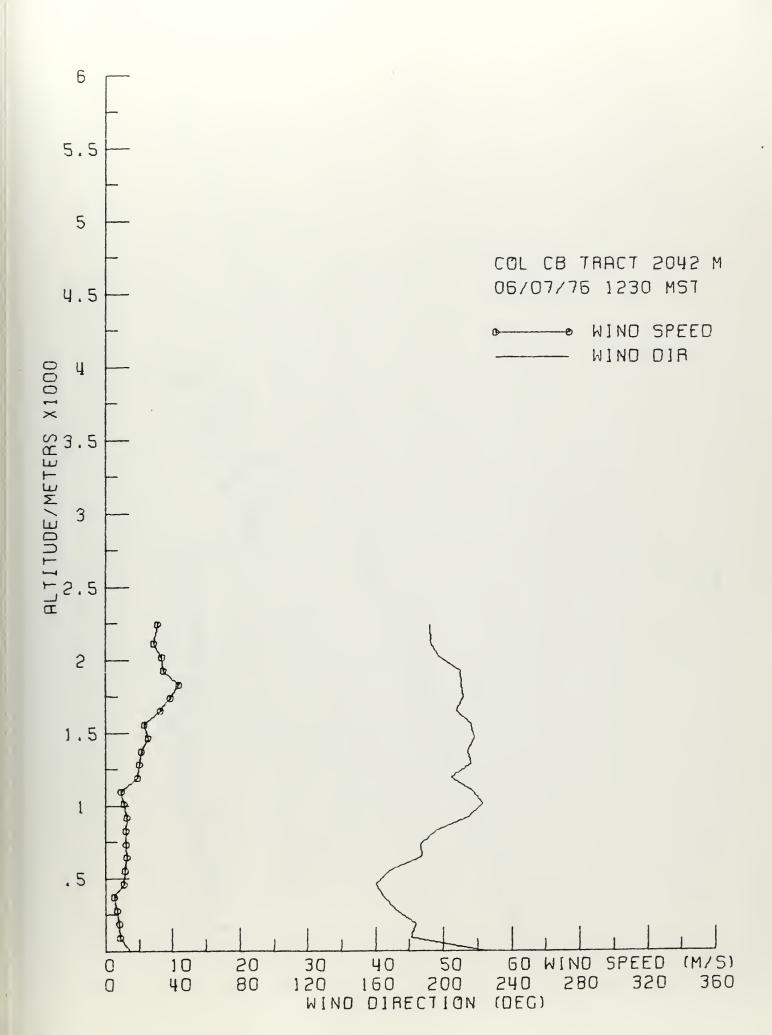




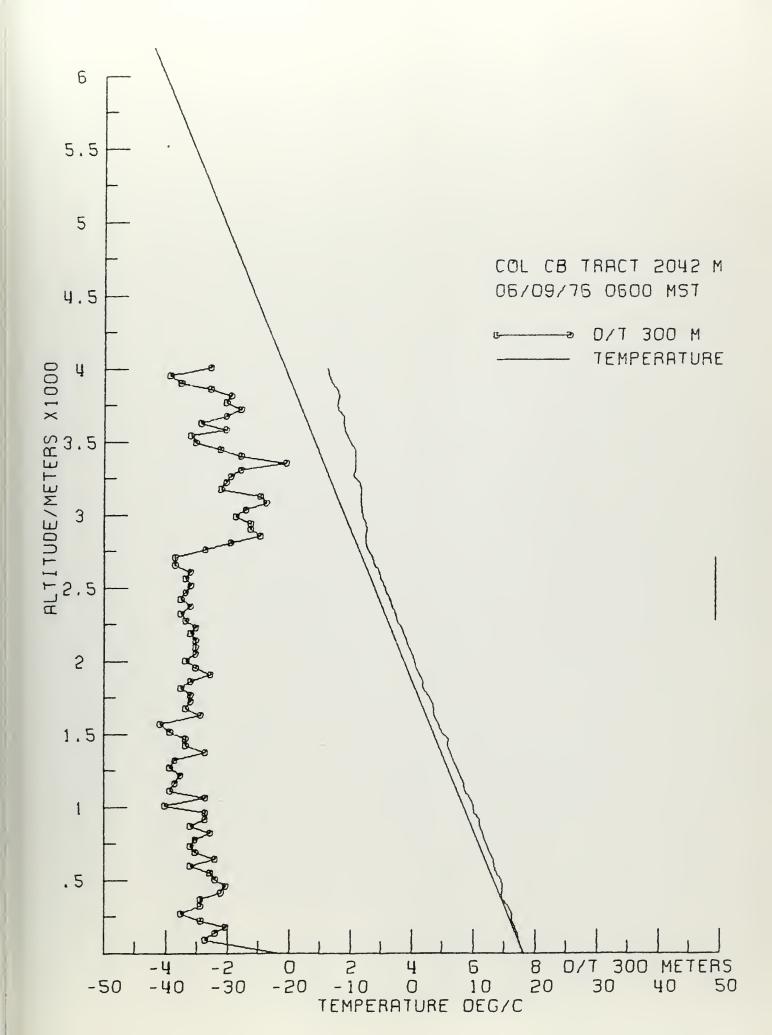




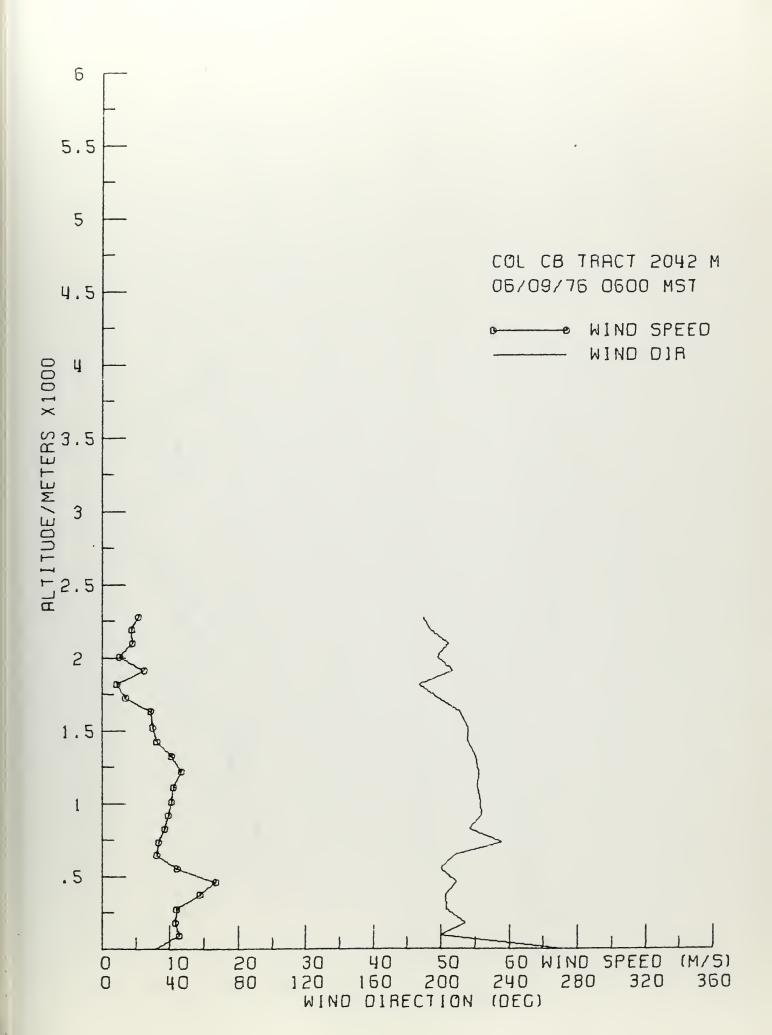




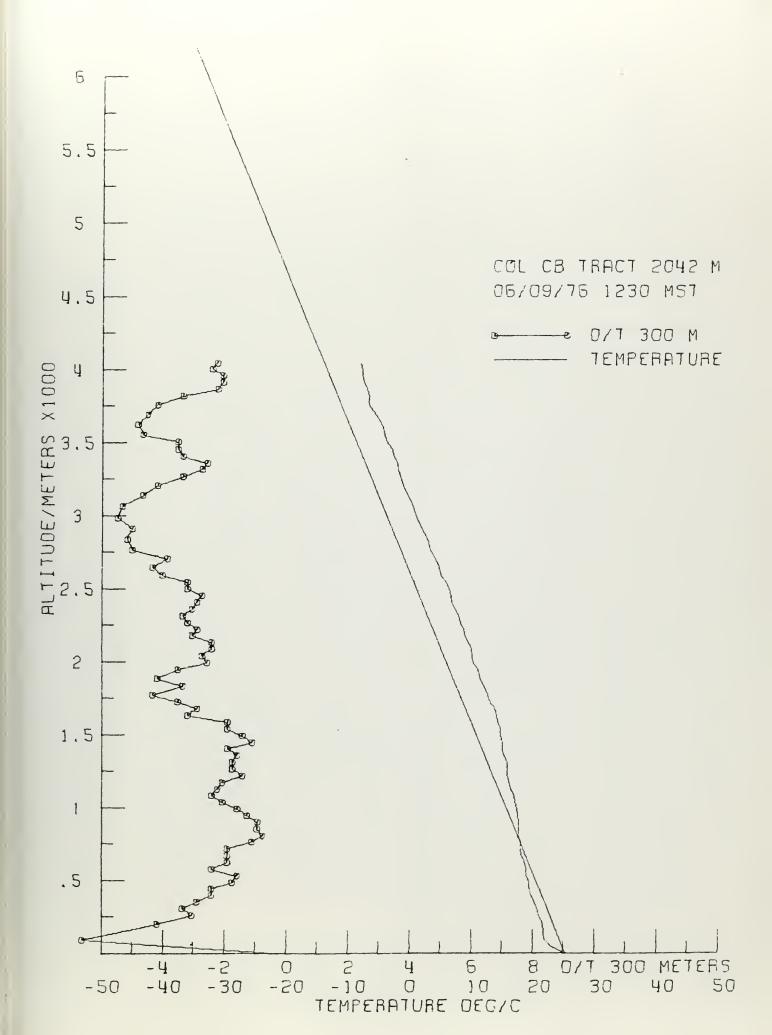




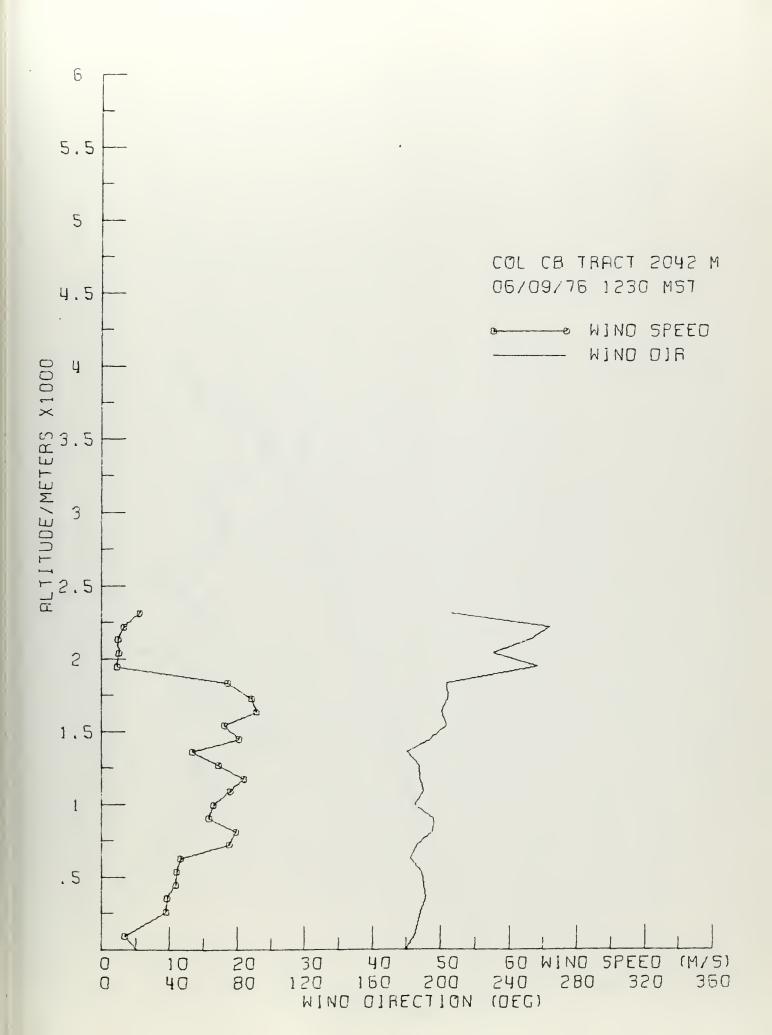




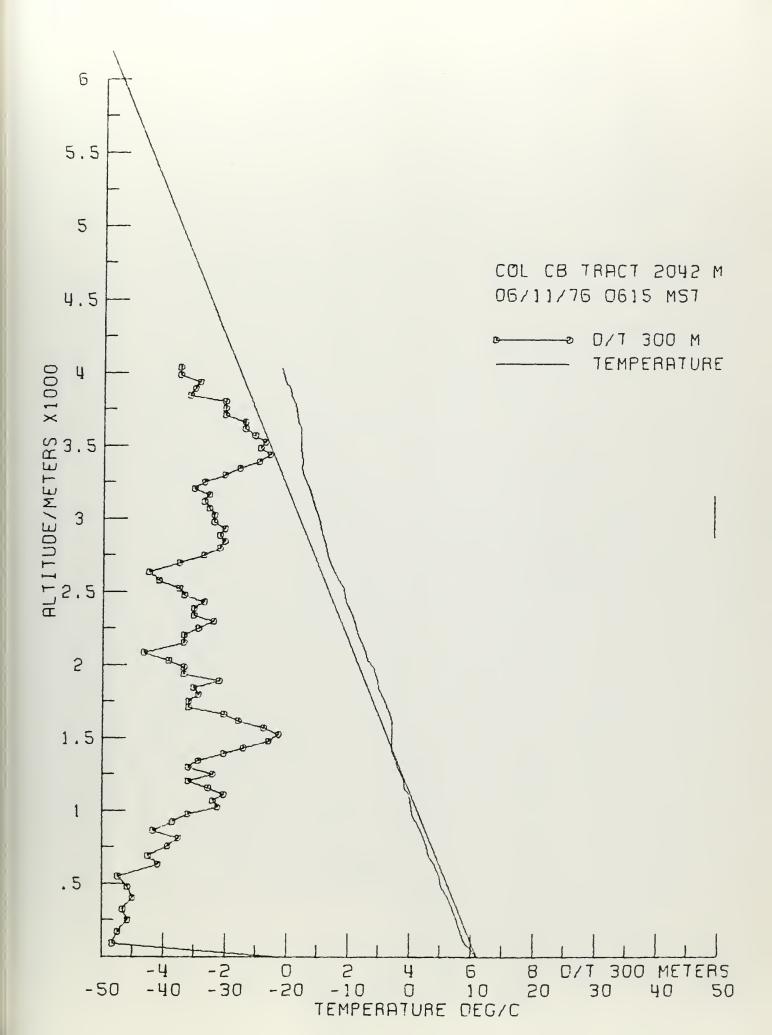




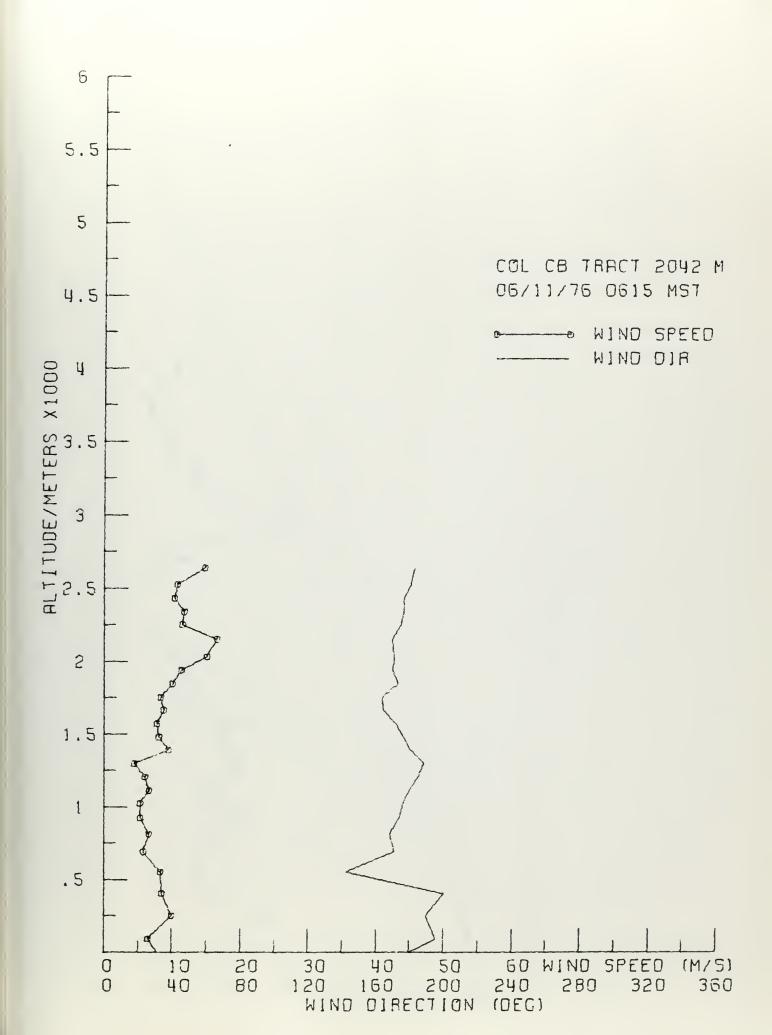




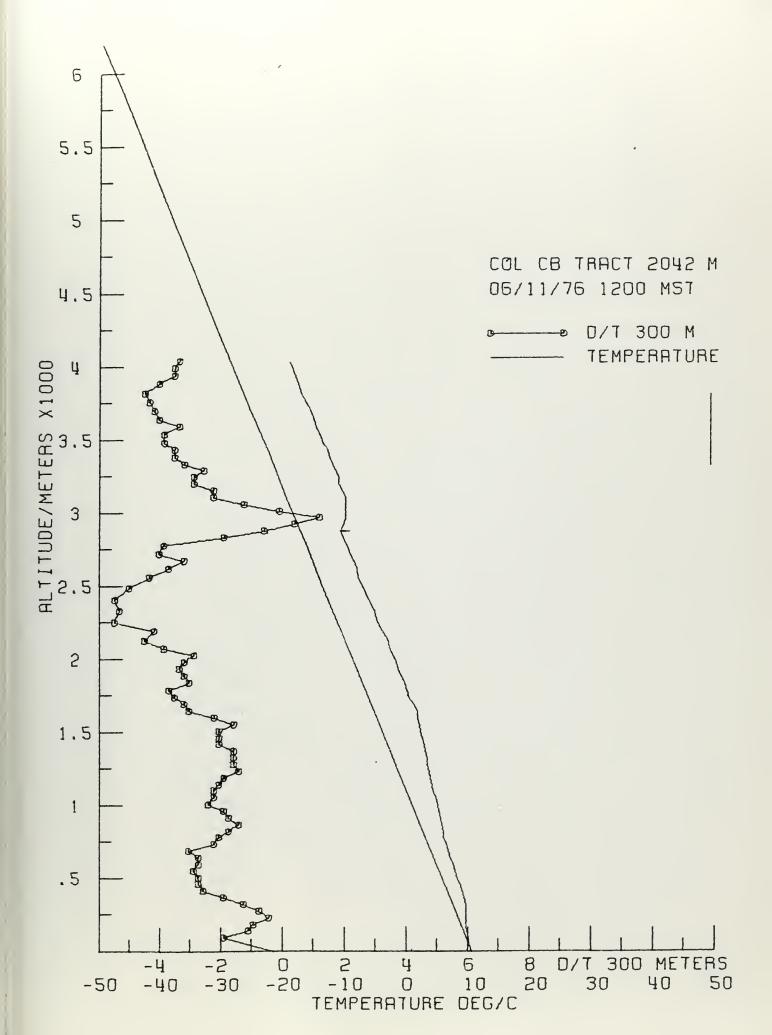


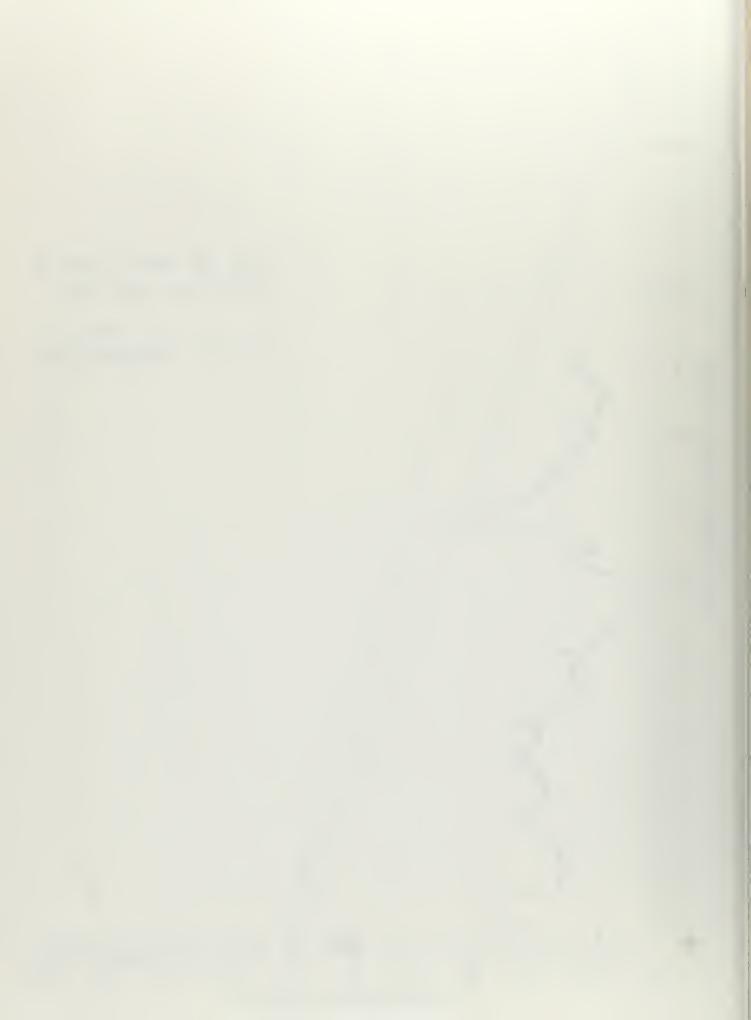


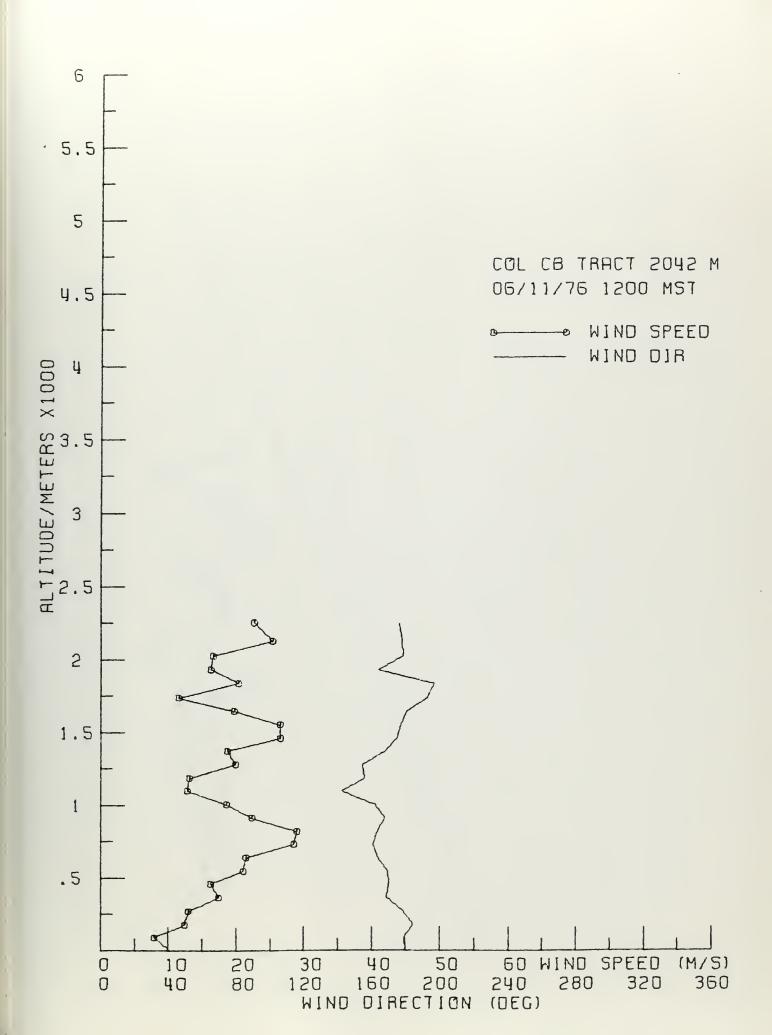




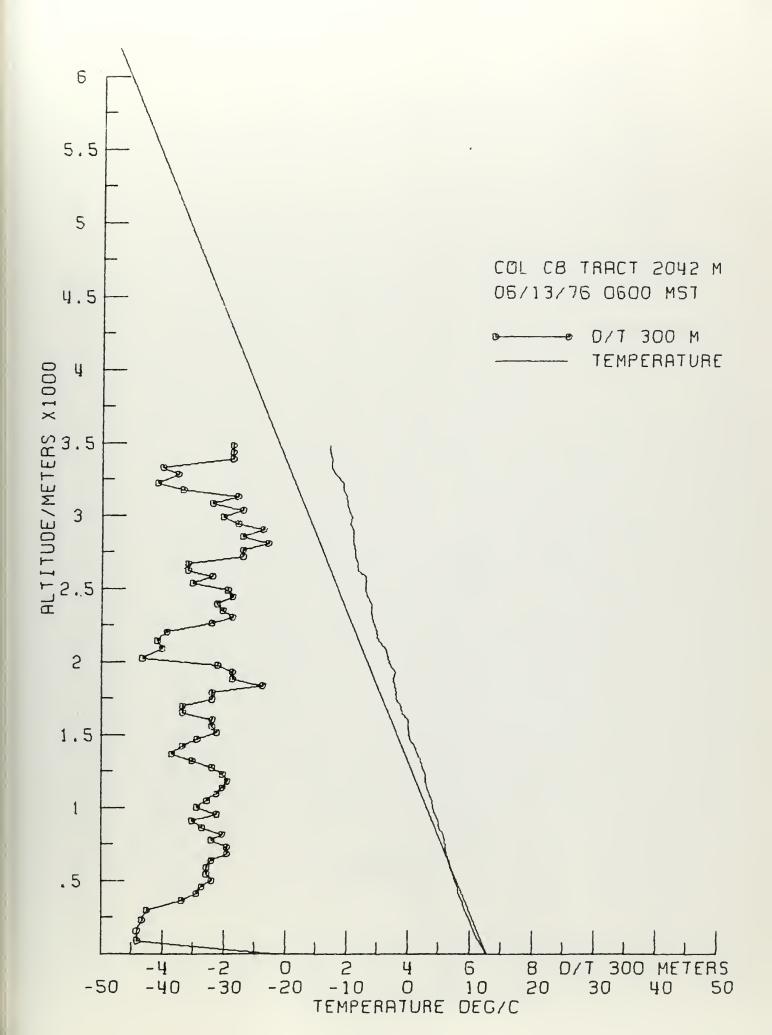




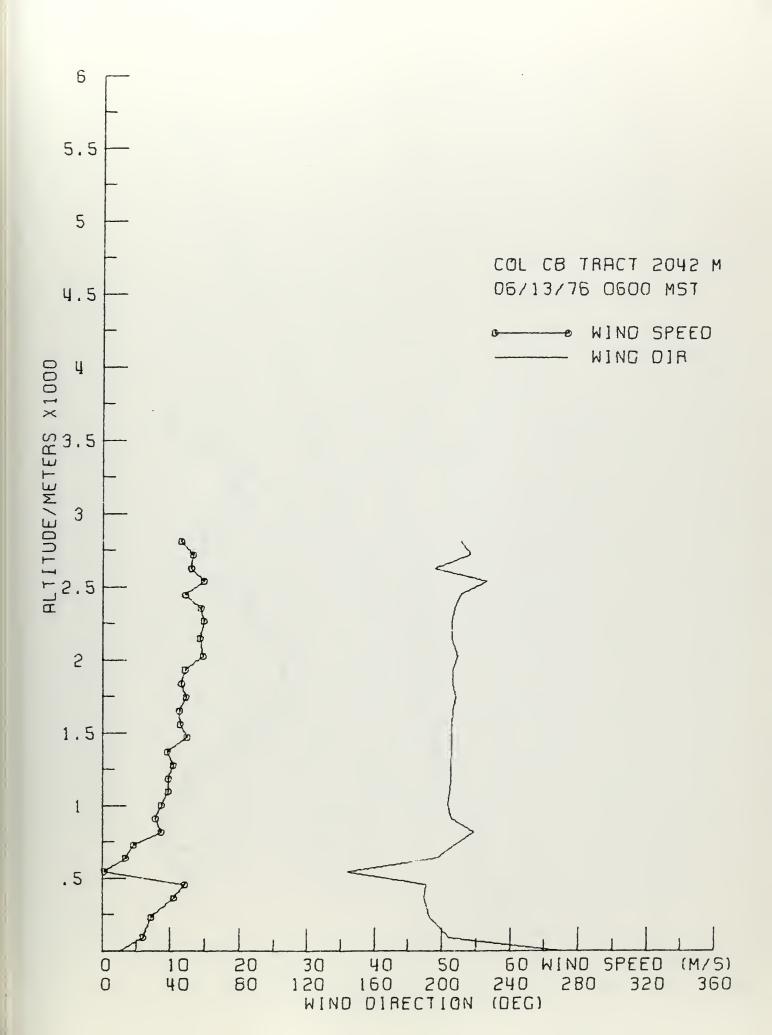




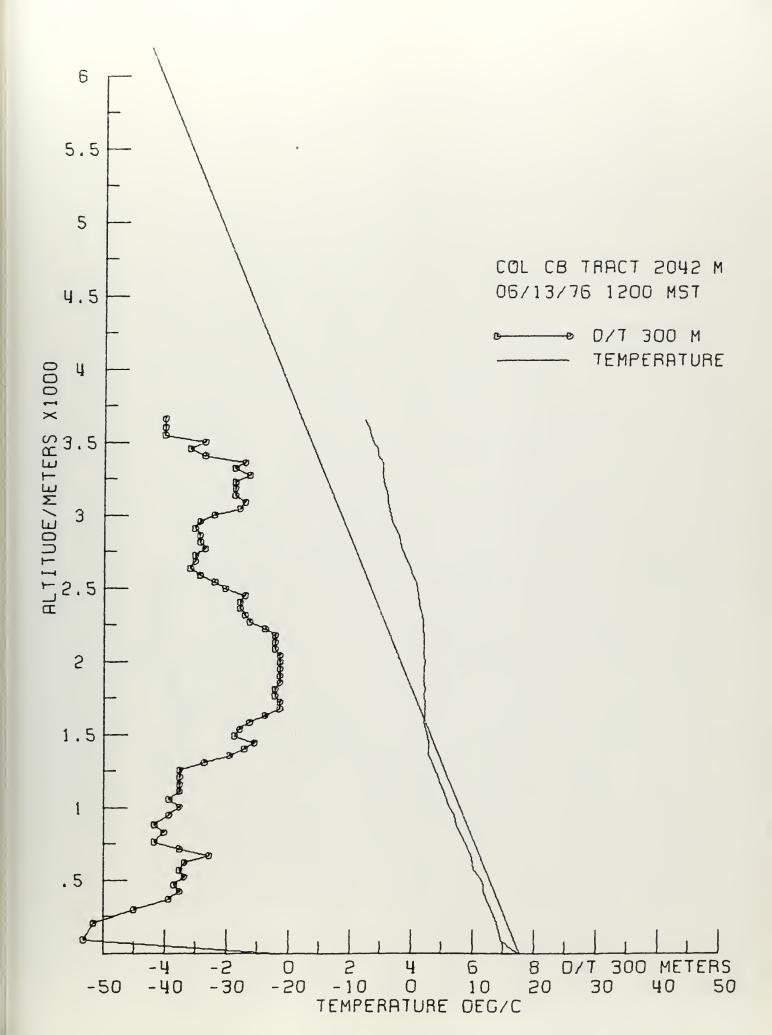




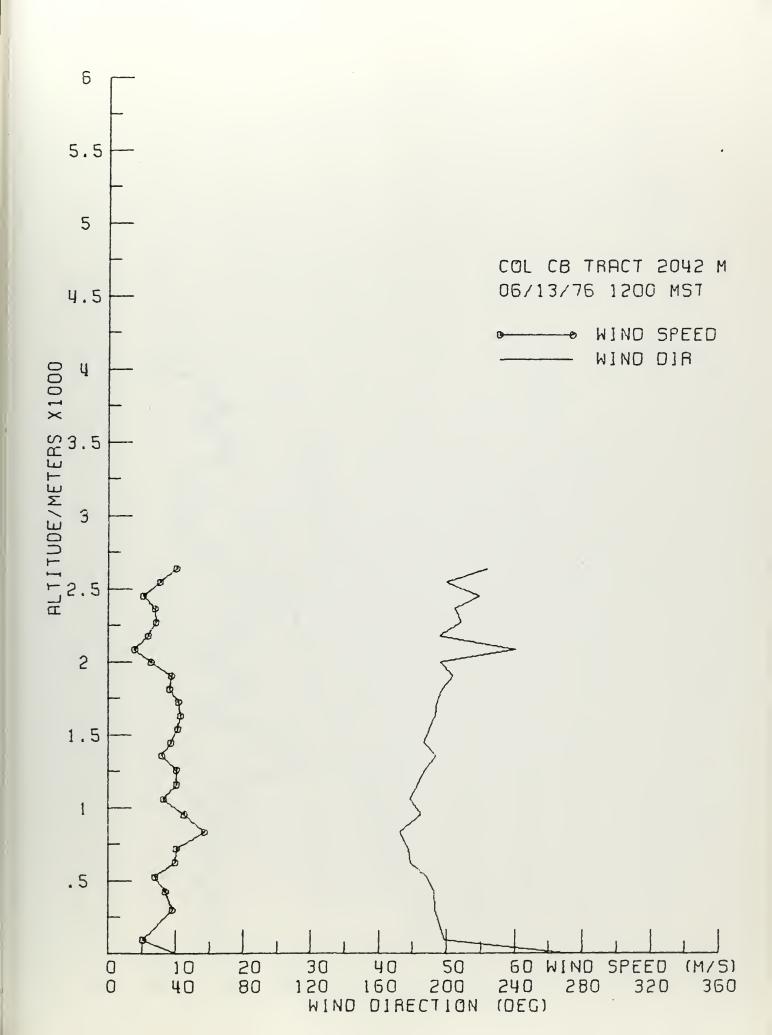




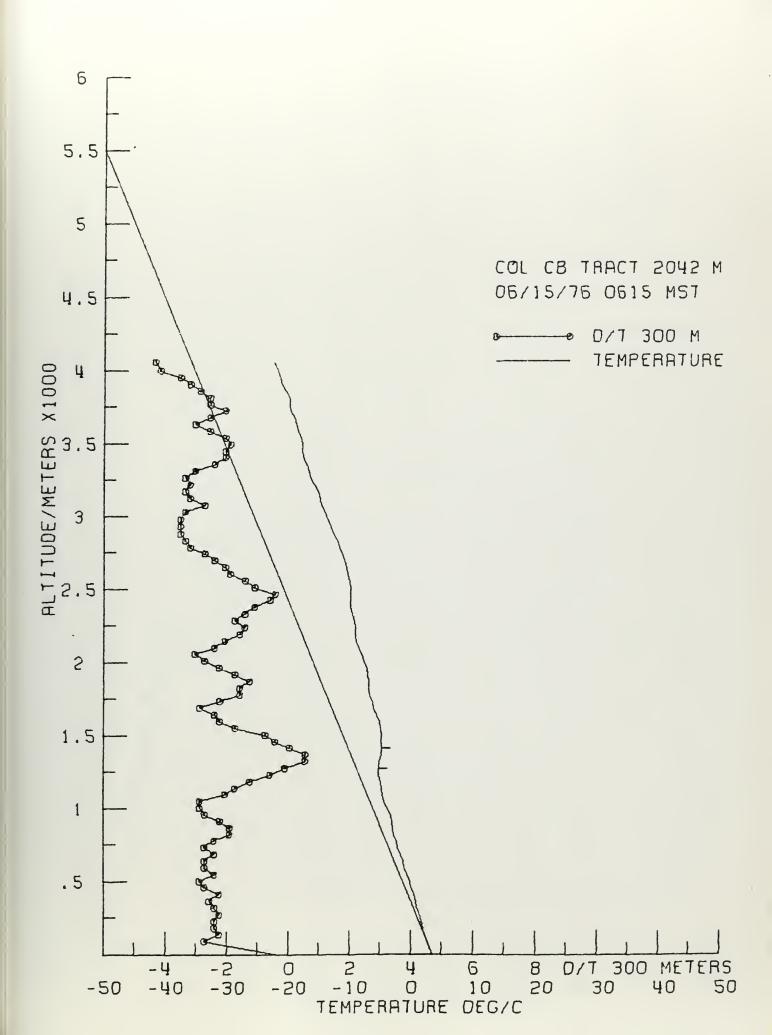




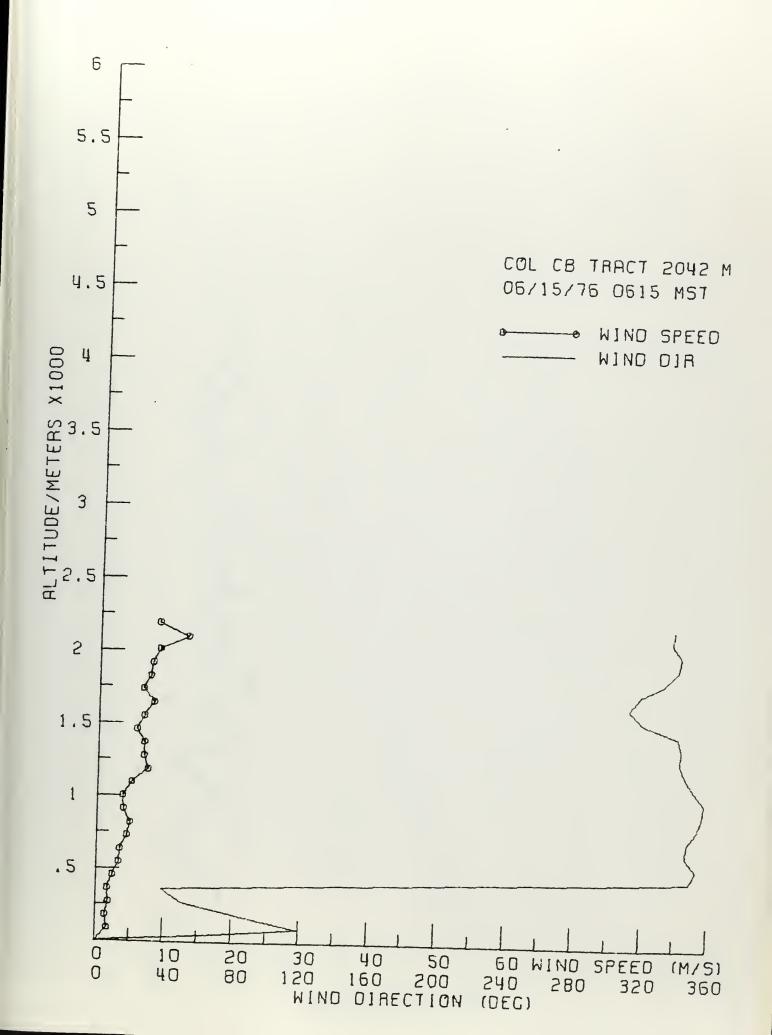




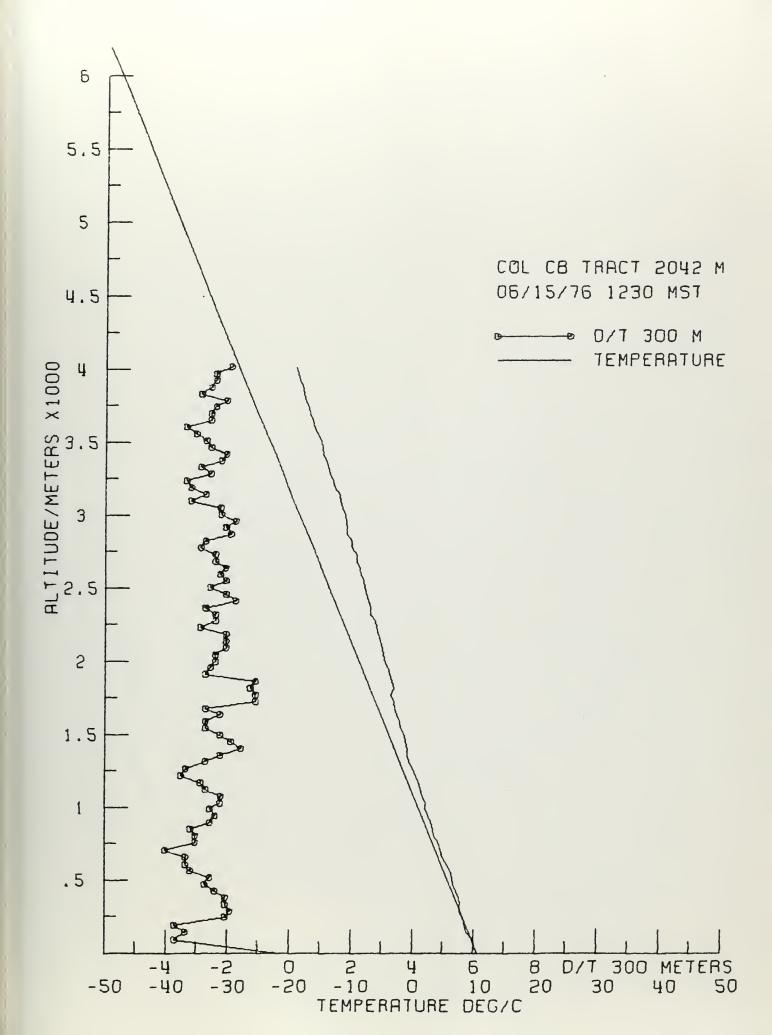




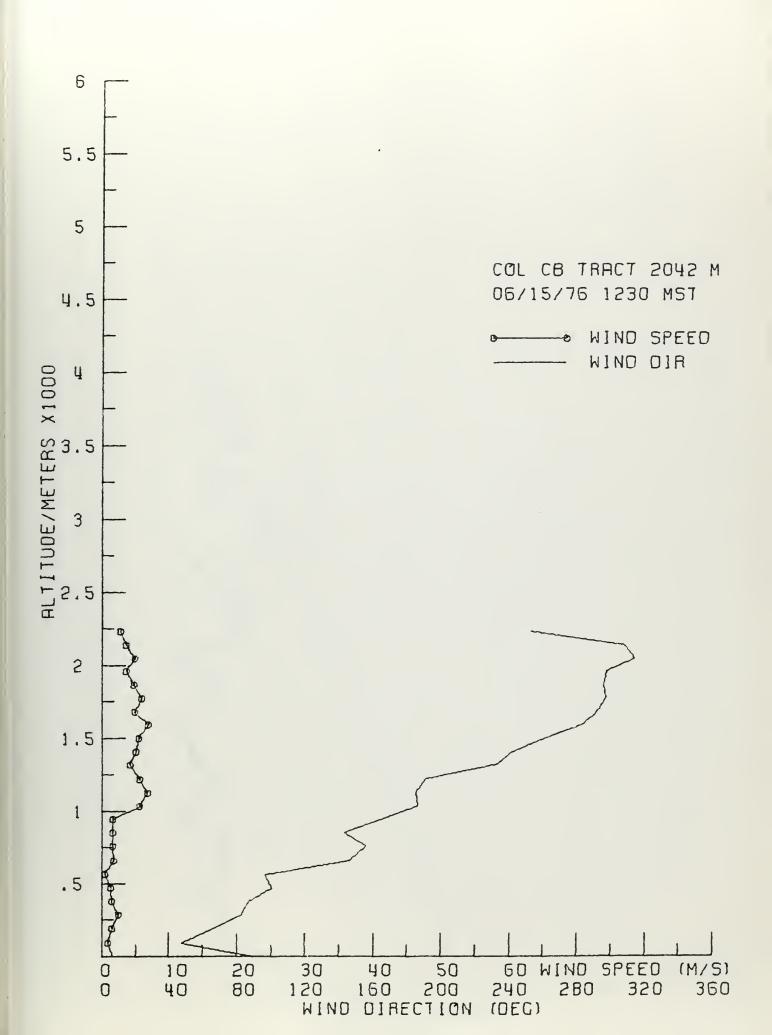




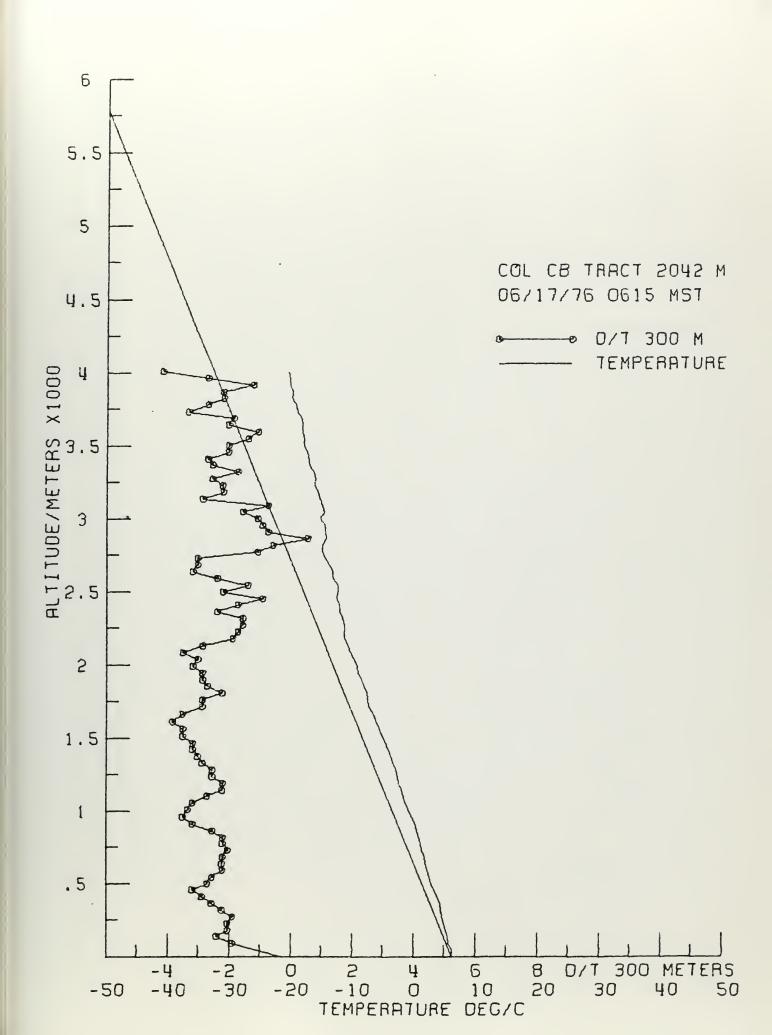


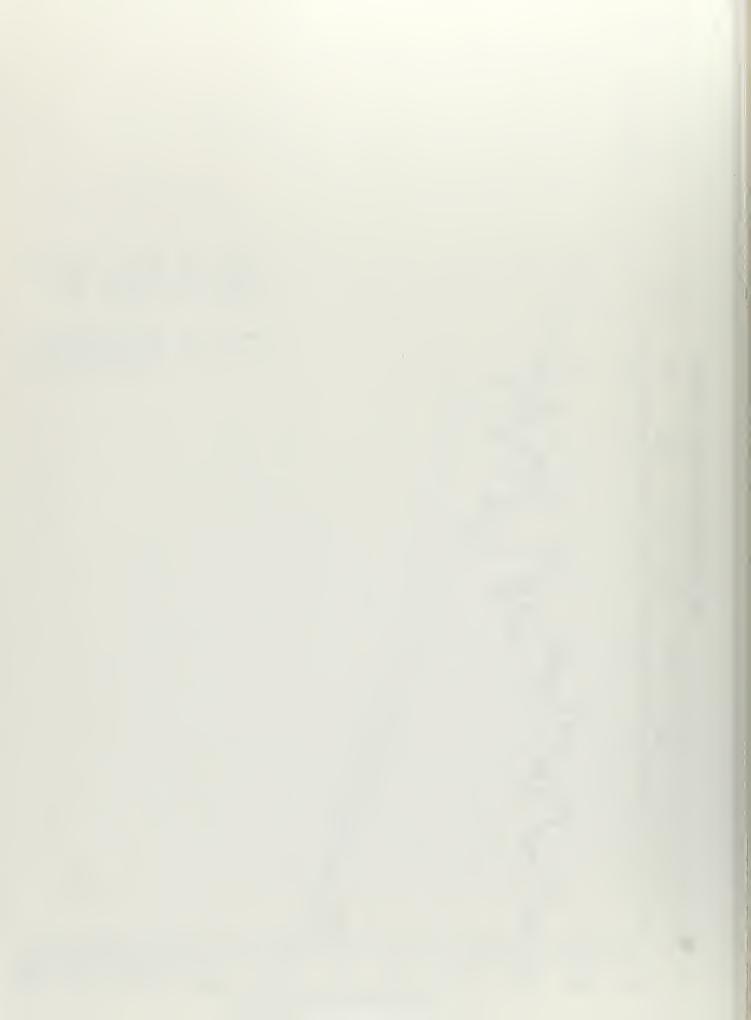


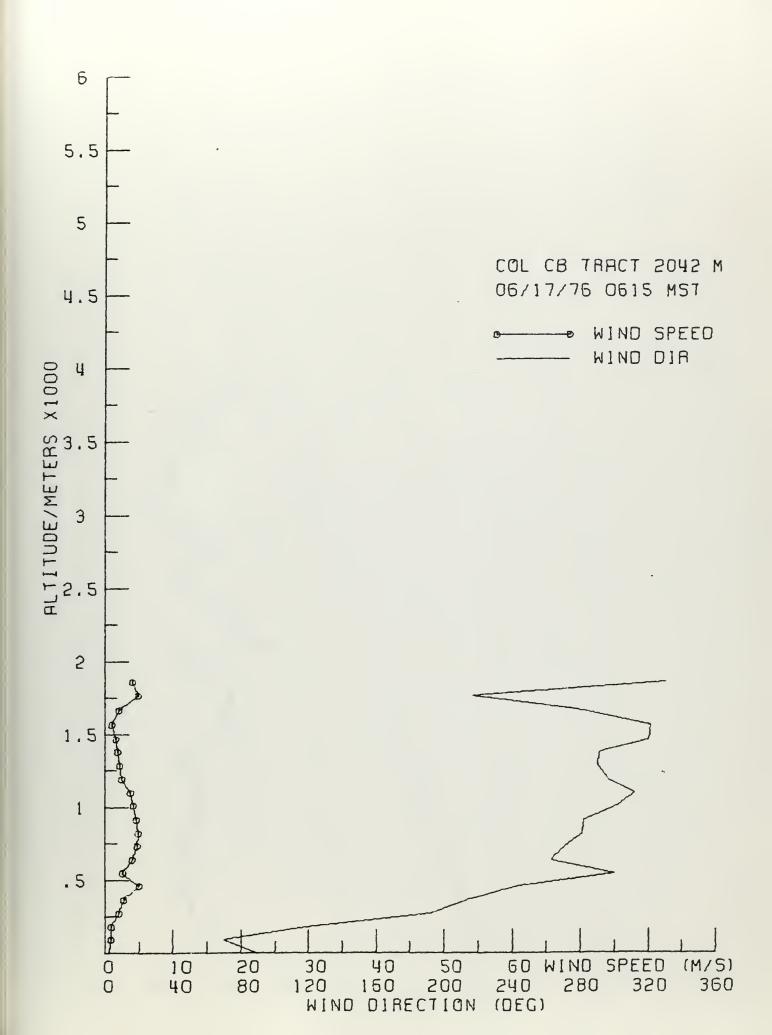




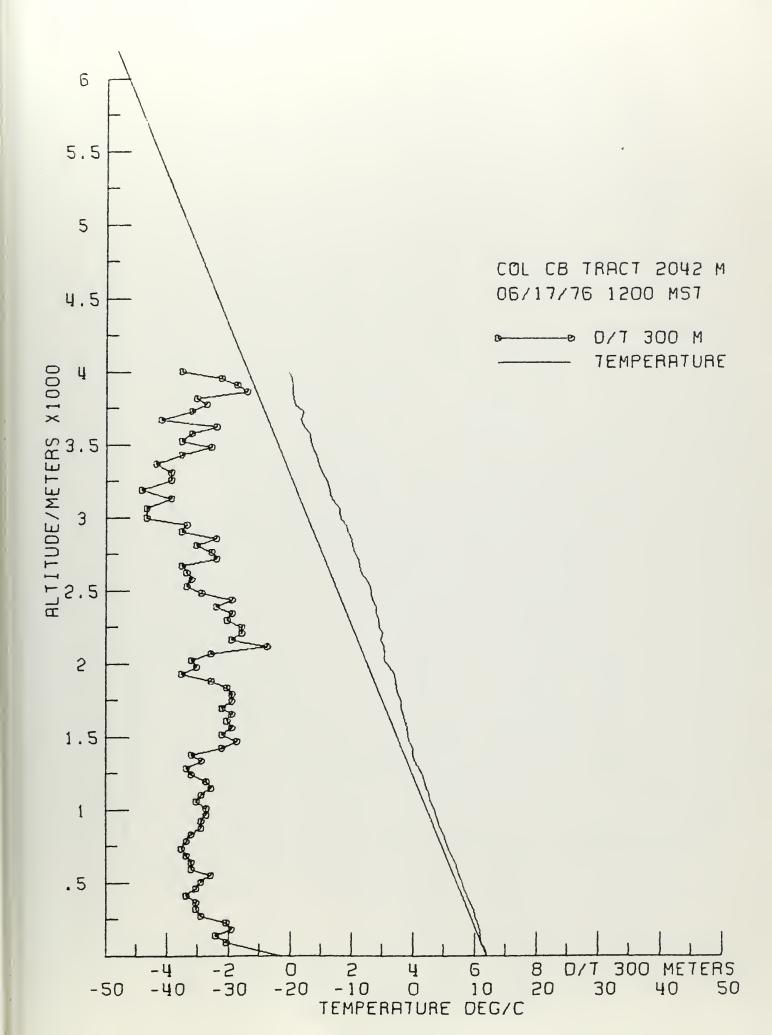




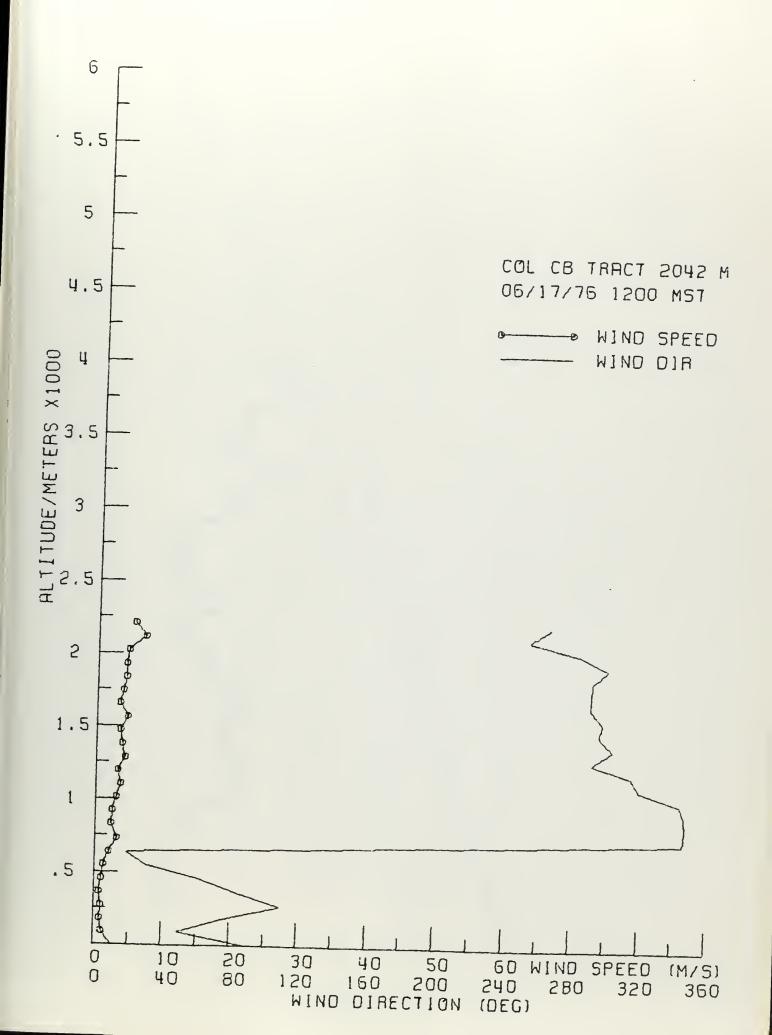




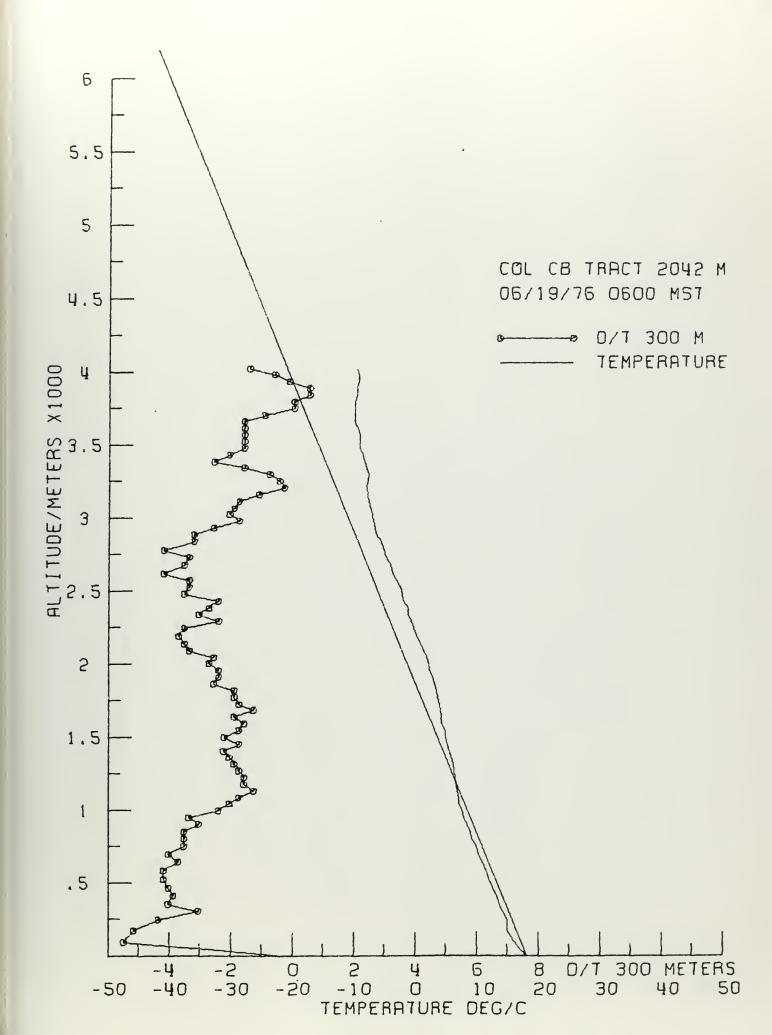




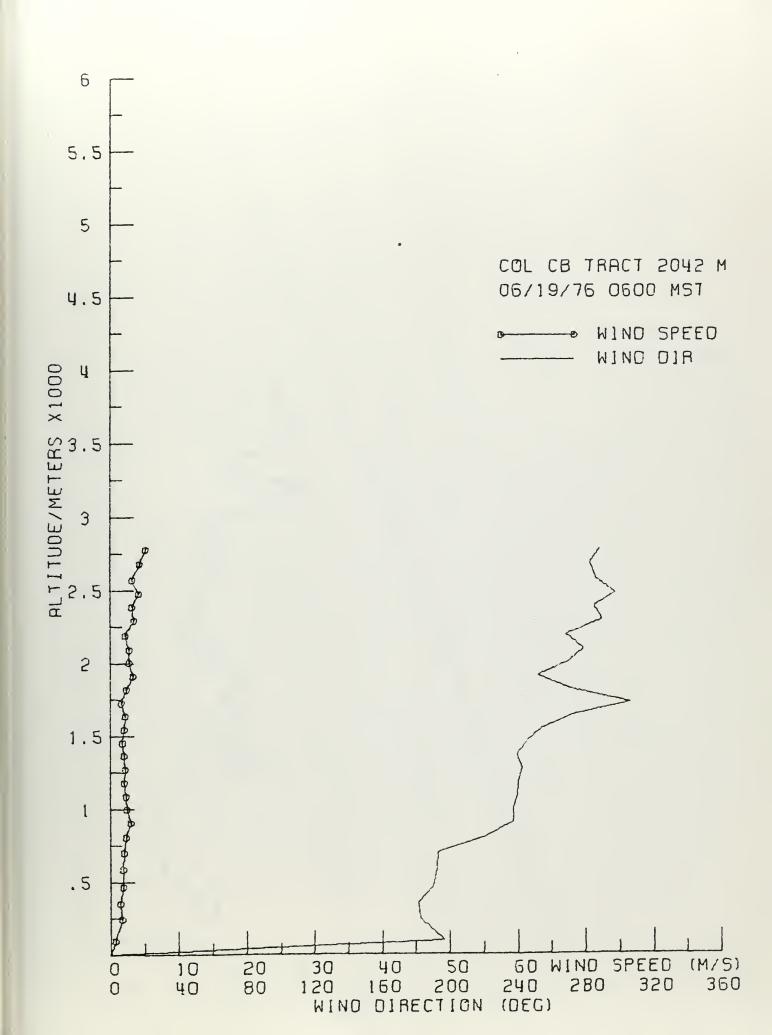




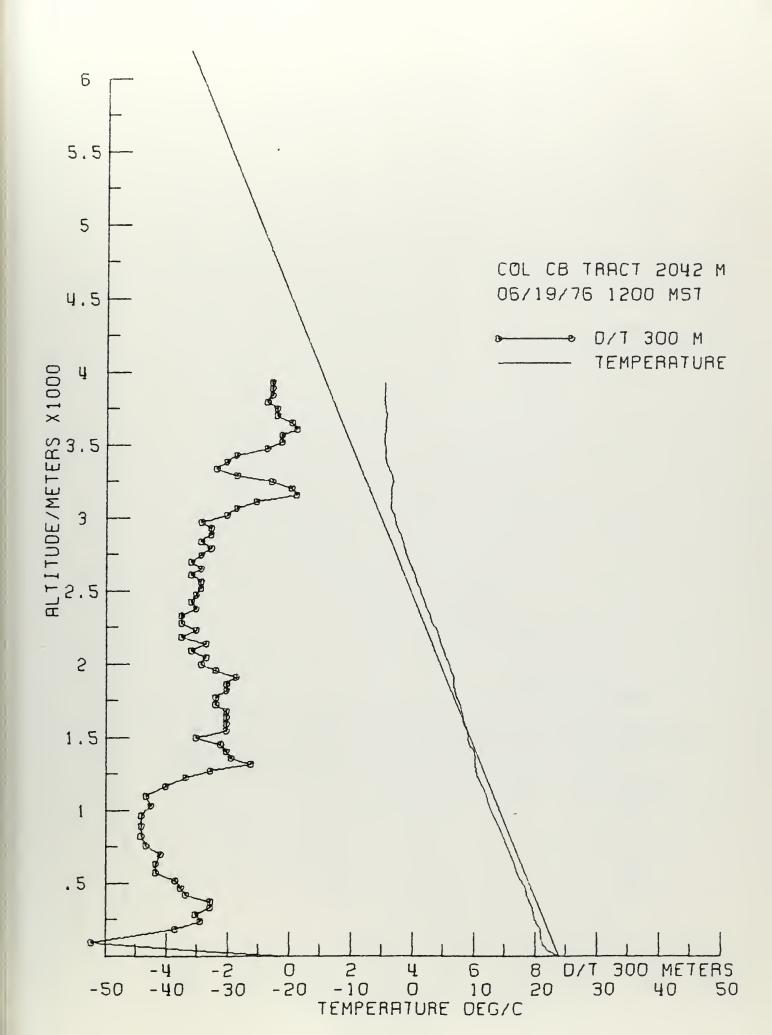




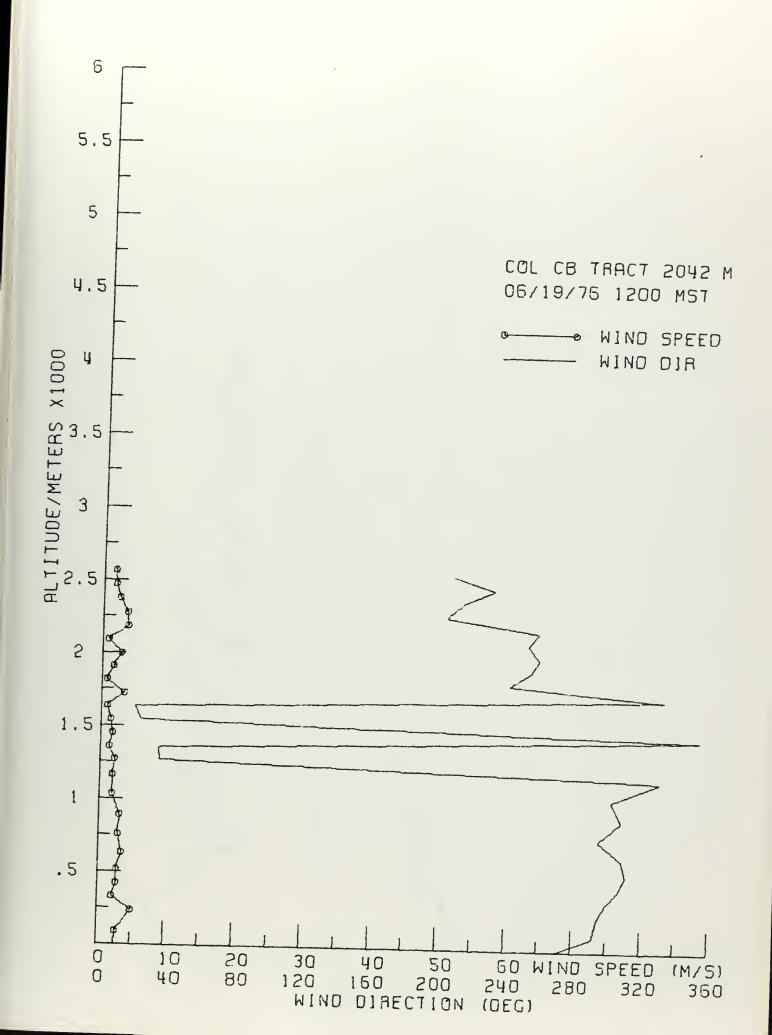




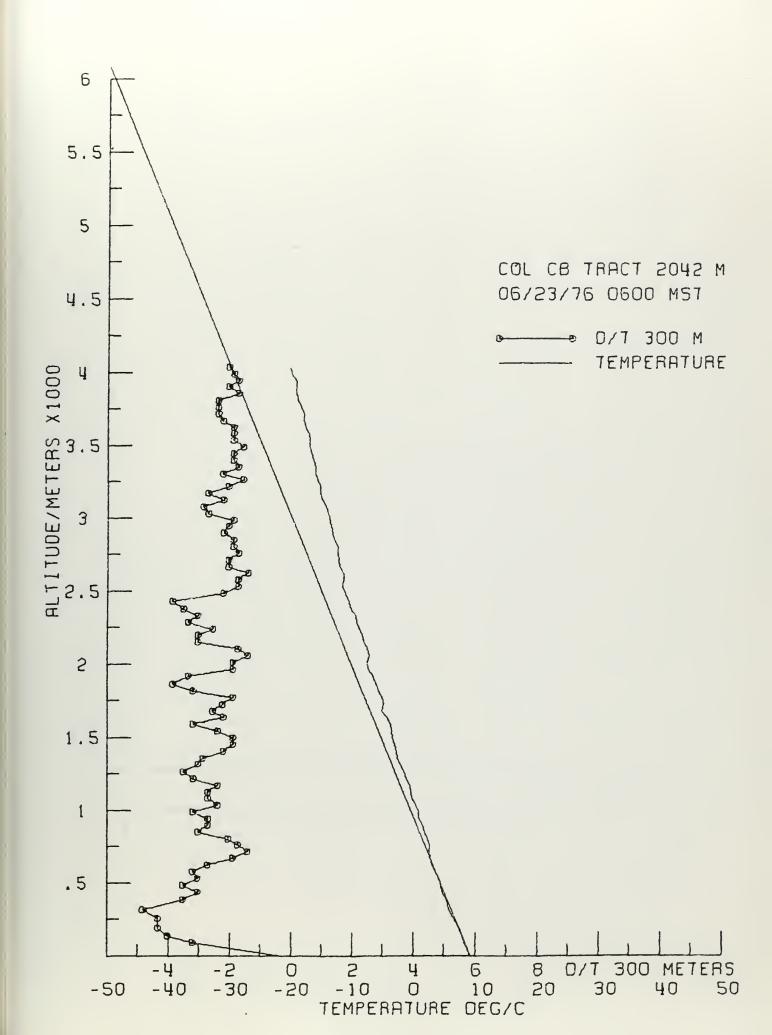




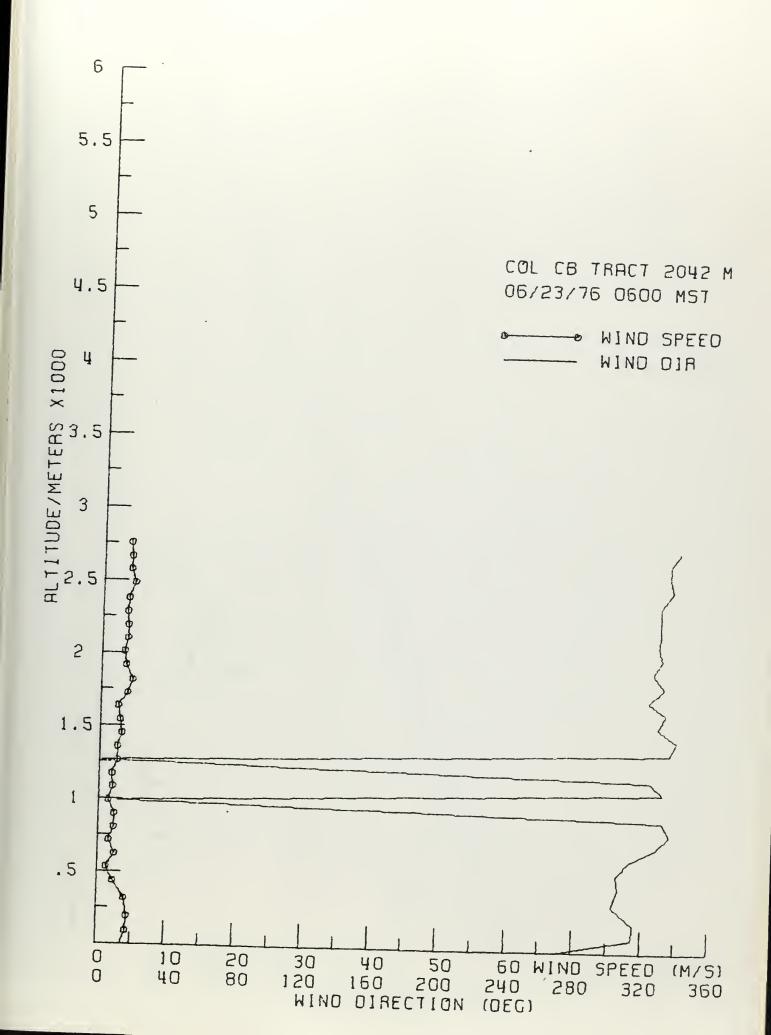




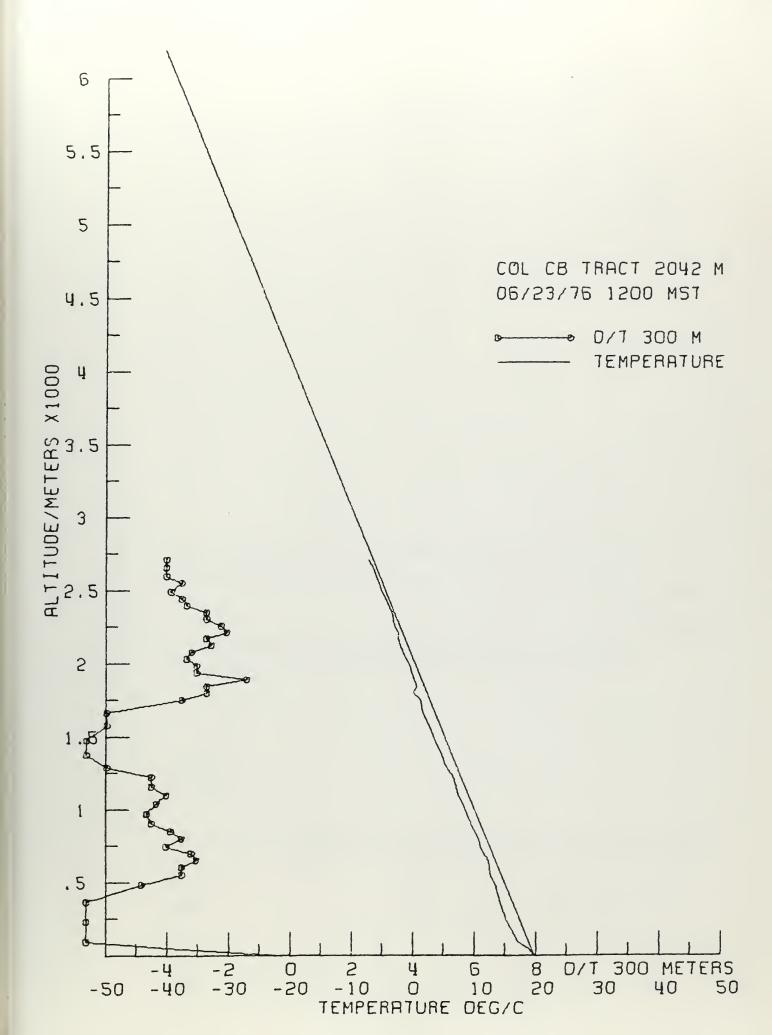




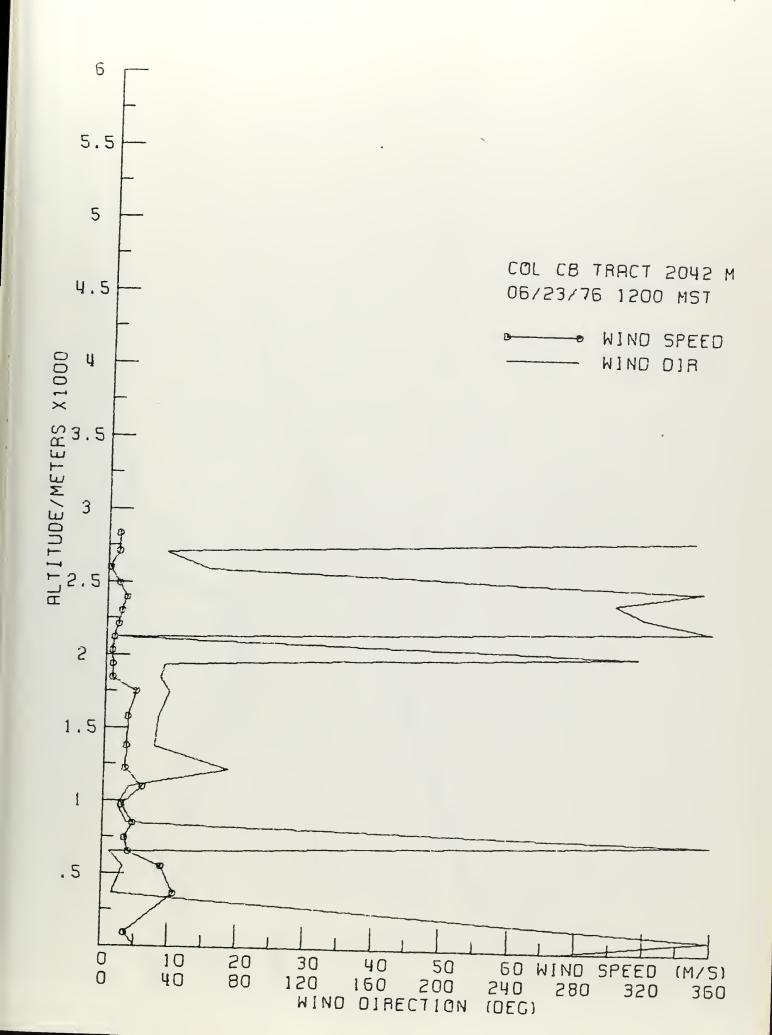




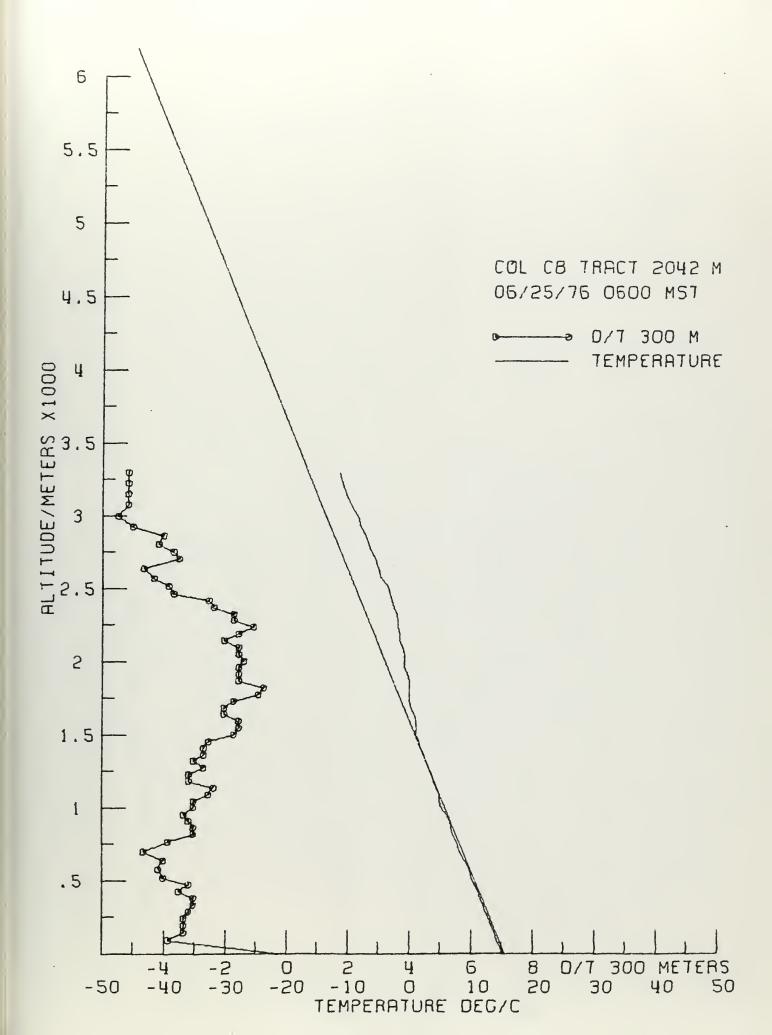




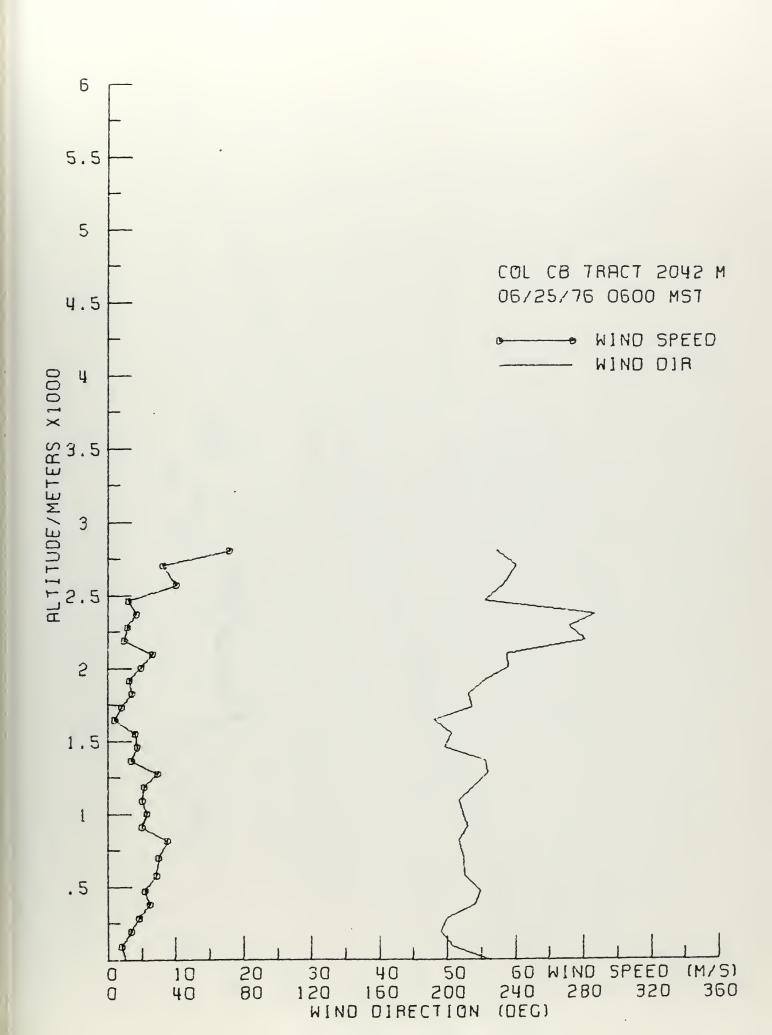




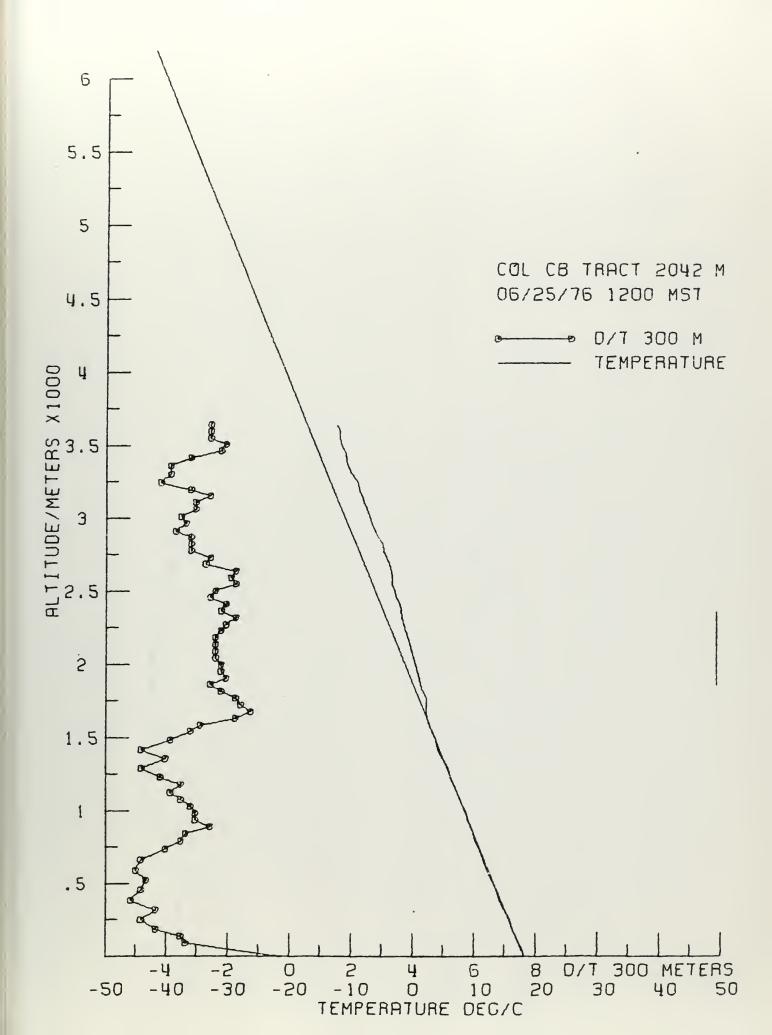




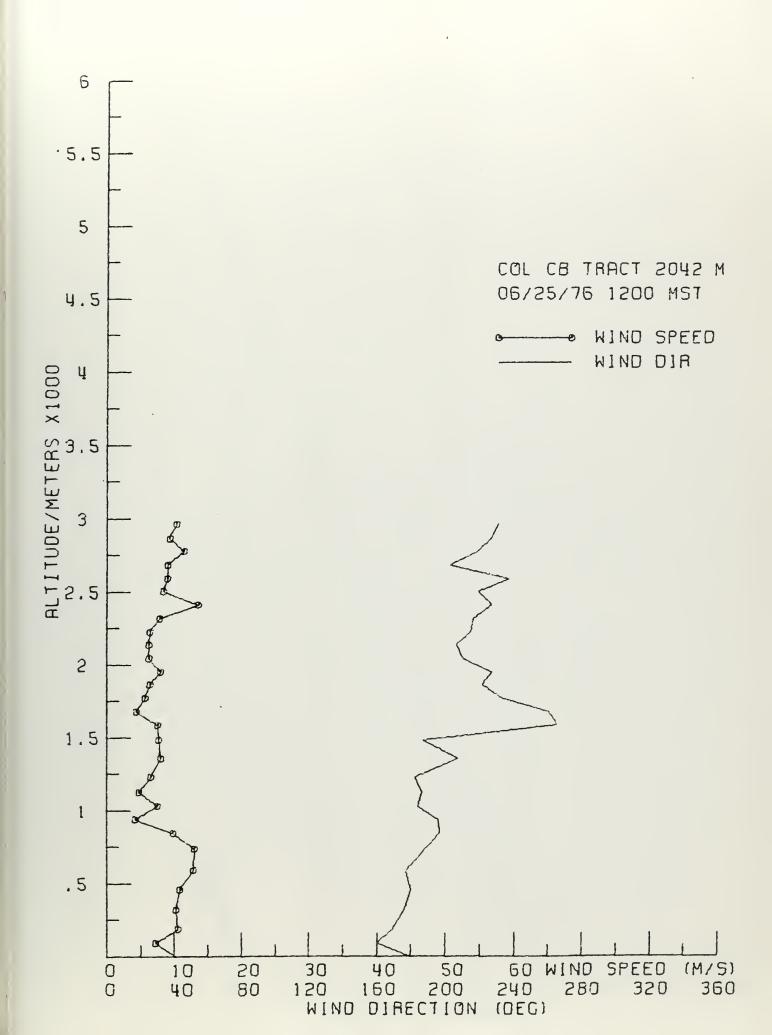




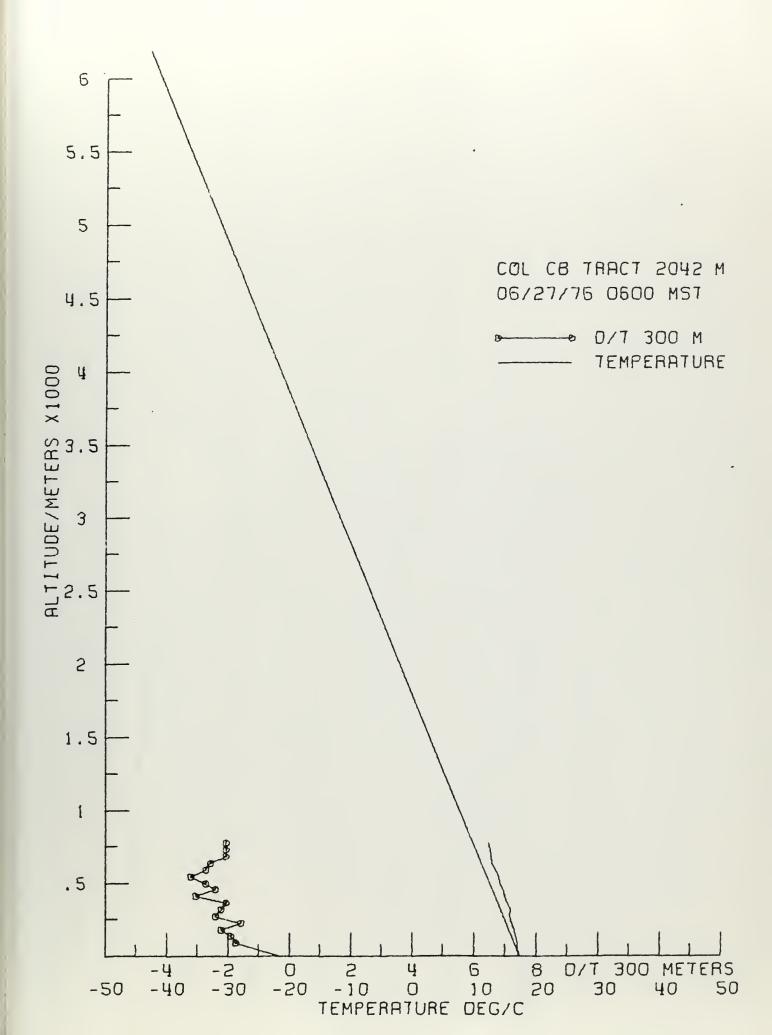




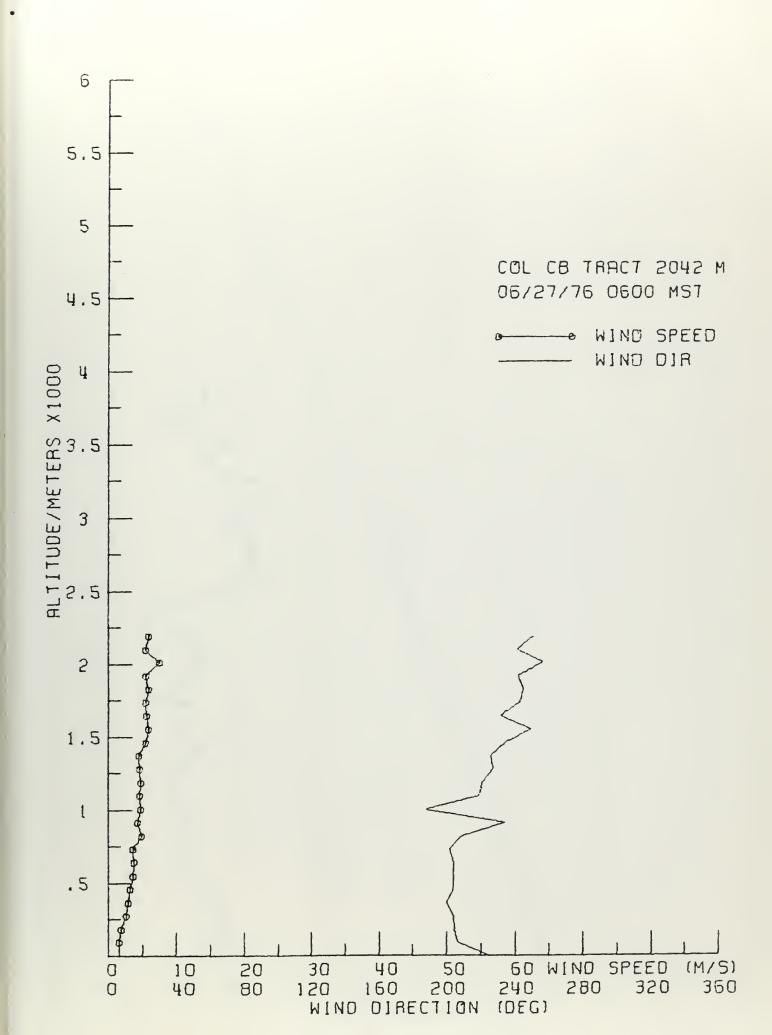




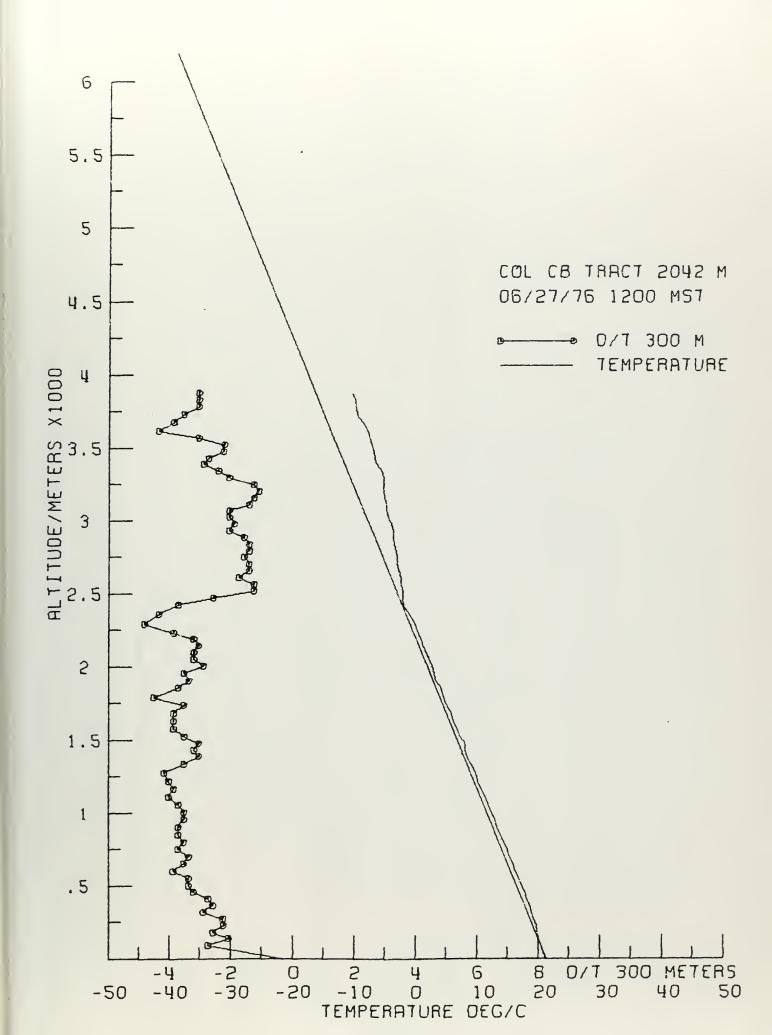




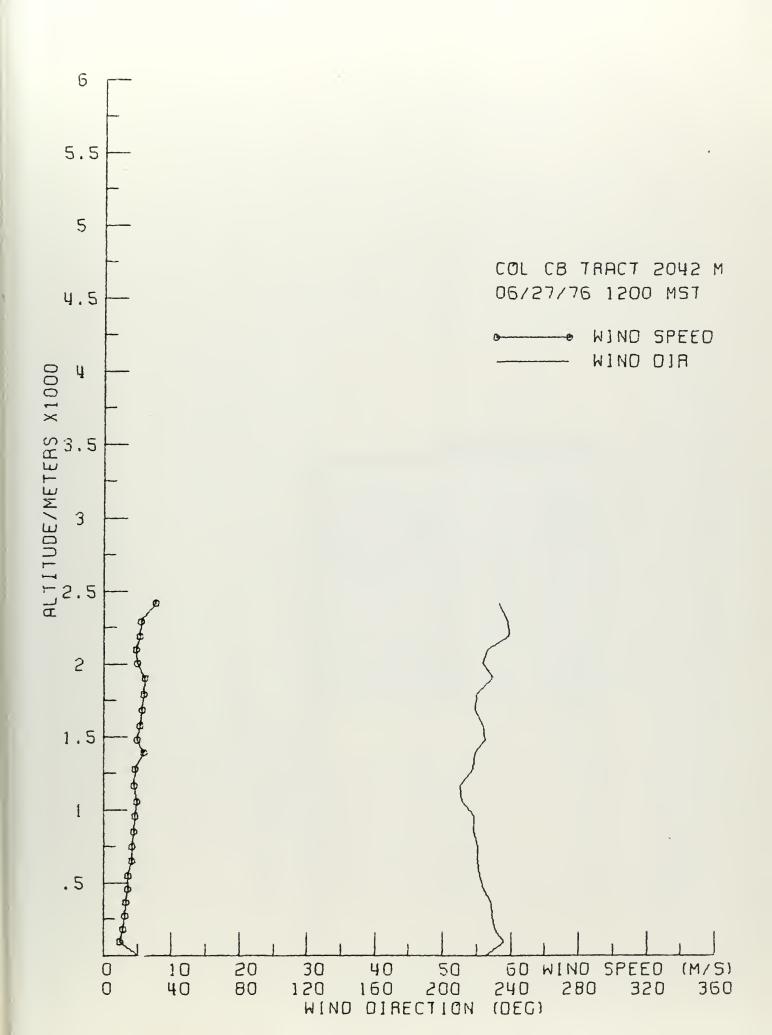














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